

Promotor Prof. dr. Klaas Willems
 Vakgroep Taalkunde

Decaan Prof. dr. Marc Boone
Rector Prof. dr. Anne De Paepe

Alle rechten voorbehouden. Niets uit deze uitgave mag worden verveelvoudigd, opgeslagen in een geautomatiseerd gegevensbestand, of openbaar gemaakt, in enige vorm of op enige wijze, hetzij elektronisch, mechanisch, door fotokopieën, opnamen, of enige andere manier, zonder voorafgaande toestemming van de uitgever.



Faculteit Letteren & Wijsbegeerte

Maarten De Backer

Lexical neutralisation

Theoretical and empirical perspectives

Proefschrift voorgelegd tot het behalen van de graad van
Doctor in de taalkunde

2014

Acknowledgements

Now that I have been working for about 2 years outside of University, I look back rather fondly at the time I was working on my research project. Nevertheless, the finalisation of this dissertation has been a challenging (not to say, daunting), though also personally rewarding task. Of course, this dissertation is not the result of the work of myself alone, and I wish to extend my sincere thanks to those who helped me shape the dissertation in its present form. I am most grateful to my supervisor Klaas Willems, for his continuous support, patience, motivation, enthusiasm and immense knowledge. The many enlightening discussions I enjoyed with him were a great help to sharpen my own thoughts and analyses (for any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own). Without his guidance and persistent help this dissertation would not have been possible. I am also indebted to Dr. Lynne Murphy and Prof. Dr. Martina Penke who, being members of my doctoral guidance committee, inspired me to further explore certain topics. Many thanks also to my former colleagues, the “jubi’s”: Saar, Kristof and Ludovic, for the stimulating discussions and for being such fine colleagues. I really enjoyed the many lunch talks, or the occasional wine tastings (accompanied with oenological information by Klaas). Special thanks to Ludovic for providing constructive comments on various draft versions of the articles that are part of this dissertation. I also want to acknowledge Luc De Grauwe for helping me translate Old Saxon and Old- and Middle High German data. Johannes Kabatek and Daniel Steiner need to be thanked for recruiting participants at Tübingen University for one of the experimental surveys. I am thankful to the Research Foundations – Flanders (FWO) for providing the necessary financial support for this research. A big ‘thank you’ to my friends and family, in particular my parents, for their support and confidence in my abilities. My warmest gratitude, finally, for her endless patience and understanding goes out to my love Sarah, to whom I dedicate this dissertation.

Table of Contents

Introduction	1
1.1 General purpose of the dissertation.....	1
1.2 The concept of neutralisation outside the field of phonology	2
1.3 Neutralisation in the writings of Coseriu	5
1.4 Neutralisation vs. markedness theory	7
1.5 Neutralisation of gender oppositions: the interpretation of masculine personal nouns	8
1.6 Concluding chapter	9
1.7 Contribution	10
 Chapter 1 The concept of neutralisation outside the field of phonology	 11
1.1 Introduction.....	12
1.2 Neutralisation in phonology: Trubetzkoy	13
1.3 The first attempts to extrapolate the concept of neutralisation to the field of meaningful units.....	16
1.3.1 Hjelmslev on neutralisation	16
1.3.2 The concept of neutralisation in the 1950s.....	18
1.3.3 Martinet's questionnaire of 1957.....	24
1.4 The various senses of neutralisation from the 1960s onwards	26
1.4.1 Sense 1: suspension of a semantic opposition between two (or more) lexical units or grammatical categories in certain syntagmatic positions.....	26
1.4.2 Sense 2: Neutralisation as the suppression of a specific semantic feature in certain syntagmatic positions	37
1.4.3 Sense 3: Neutralisation as the suppression of an opposition between semantic features	39
1.4.4 Sense 4: Neutralisation as syncretism	40
1.4.5 Sense 5: Neutralisation as the paradigmatically determined suspension of an opposition between two (or more) grammatical categories	43
1.4.6 Sense 6: neutralisation as the suspension of a grammatical category in certain syntagmatic positions	46
1.4.7 Sense 7: Neutralisation as the suspension of an opposition between two units in the sense that in some contexts these units have identical reference (neutralisation as referential identity).....	48

1.4.8	Sense 8: Neutralisation as the suspension of an opposition between two (or more) deep structures in one and the same surface structure (neutralisation as syntactic ambiguity)	48
1.4.9	Sense 9: Neutralisation as the suppression of “conformity judgements”	49
1.5	Conclusions	52
Chapter 2	Neutralisation and semantic markedness: An inquiry into types of lexical opposition in German.....	55
2.1	Introduction	56
2.2	Asymmetrical relations in lexicon and grammar	58
2.2.1	Semantic markedness: Jakobson.....	58
2.2.2	The principle of neutralisation: Coseriu	61
2.2.3	Hypothesis and methodology	63
2.3	Empirical analysis	66
2.3.1	Corpus study	66
2.3.2	Sentence processing task	80
2.3.3	Acceptability judgment task	82
2.4	Conclusions	84
Chapter 3	Lexical neutralisation: a case study of the lexical opposition ‘day’/‘night’	89
3.1	Introduction	90
3.2	The principle of neutralisation	90
3.2.1	Theoretical preliminaries	90
3.2.2	Basic properties of neutralisable oppositions	92
3.2.3	The problem of the semantic status of the unmarked term.....	95
3.2.4	Exploring the possibility of an alternative approach	96
3.2.5	A concrete example: ‘day’/‘night’	97
3.3	Empirical analysis	101
3.3.1	Methodology	101
3.3.2	A synchronic analysis of <i>Tag</i> and <i>Nacht</i> in German	103
3.3.3	The lexical units for ‘day’ and ‘night’ from a diachronic and typological perspective: arguments against the unidirectionality of neutralisation.....	112
3.4	Conclusions	119
Chapter 4	The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study	123
4.1	Introduction	124
4.2	Methodology and hypotheses.....	128
4.2.1	Questionnaire design and subject sample	128
4.2.2	Task 1.....	129
4.2.3	Task 2.....	133
4.3	Results	135
4.3.1	Task 1.....	135

4.3.2 Task 2	142
4.4 Conclusions	149
Overall conclusions.....	151
Bibliography	189

Introduction

1.1 General purpose of the dissertation

The present dissertation is concerned with the phenomenon of neutralisation as defined in the work of Coseriu (1976, 1987, 1992 [1988], among others). Although neutralisation phenomena have been described within different theoretical frameworks, questions on the interpretation of the term neutralisation by linguists of different theoretical persuasions and on the value of Coseriu's neutralisation theory in particular have not been addressed before. This dissertation is an attempt to fill this gap. The scope of the dissertation is restricted, though, in that it focuses on a theoretical and empirical investigation of neutralisation (and related phenomena) in the field of the *lexicon*. This thematic restriction has two reasons: first, there already exists an extensive body of literature on the concept of neutralisation in phonology, where the concept was introduced (cf. also the recent contribution of Silverman 2012, in which almost all phonological neutralisation theories from Trubetzkoy onwards are discussed). The concept of neutralisation outside the field of phonology, on the other hand, has received much less attention (however, see, for example, Rachidi 1989 for a discussion of neutralisation and types of neutralisation contexts with respect to adjectival oppositions).¹ Second, although the concept of neutralisation has been extrapolated to both the field of the lexicon and the field of grammar, a detailed description of grammatical neutralisation would go beyond the scope of this dissertation. Grammatical neutralisation (e.g. *Cäsar überschreitet den Rubikon* 'Caesar crosses the Rubikon', where the 'historical present' is used instead of the past tense, Coseriu 1992 [1988]: 216) is clearly different from lexical neutralisation (e.g. *Vier Tage in Paris bleiben* 'to stay in Paris for four days', where *Tag* encompasses both *Tag* and *Nacht*) and, therefore, requires a separate analytical treatment.

¹ For some in-depth discussions of phonological neutralisation I refer to Bazell (1956), Davidsen-Nielsen (1978), Akamatsu (1988), Schmidt (1989: 3-44) and Brasington (1994).

The general purpose of the dissertation can thus be summarised as follows:

- to gain a better insight into the way various linguists have made use of the concept of neutralisation in semantics and to investigate whether a coherent interpretation of the concept is possible and theoretically as well as methodologically useful;
- to analyse different examples of Coseriu lexical neutralisation empirically in order to evaluate the theoretical utility of Coseriu's approach to neutralisation; to my knowledge, such an empirical analysis has not been carried out before.

The research presented in the dissertation has been conducted in the form of various case studies, each dealing with a specific topic that falls within the thematic purview of the dissertation. Each case study is an article in its own right, such that each chapter of this dissertation actually represents a stand-alone article.² In the subsequent paragraphs, I briefly outline the research questions that are addressed in the different articles.

1.2 The concept of neutralisation outside the field of phonology

The phenomenon of neutralisation was described for the first time in a systematic way in the field of phonology by members of the Prague Linguistic Circle in 1930s, notably by Trubetzkoy (1939) and Jakobson (1971 [1932]; 1971 [1939]) (see also Hjelmslev 1971 [1939]). The term neutralisation (or *Aufhebung* in Trubetzkoy's words) referred to the inoperability of an otherwise operable functional phonological opposition in certain syntagmatic contexts, such as word-final position. For example, German *bunt* 'colourful' and *Bund* 'association' are pronounced alike and, thus, the opposition between /t/ and /d/ is rendered inoperable, with the voiceless plosive occurring in the position of neutralisation. After its introduction in phonology, the term neutralisation was soon transferred to other domains of language. Within the structural-functional paradigm, Martinet (1968, see also Martinet, ed. 1957) and particularly Coseriu (1978 [1964]) pointed to the relevance of the notion to the field of the lexicon and grammar as well. One oft-cited example stands out as representative of lexical neutralisation according to Coseriu, viz. the lexical pair *Tag/Nacht* ('day'/'night') in German, as illustrated in (1) and (2):

² The minimum requirement at Ghent University to be admitted to the doctoral defense with a cumulative Ph.D. based on articles is that the dissertation consists of at least 4 international peer-reviewed authored or co-authored articles, two of which have to be published in journals covered by the Web of Science (Thomson Reuters). The Web of Science, which has become part of the Web of Knowledge, can be accessed at: <http://apps.webofknowledge.com/WOS>.

- (1) Nach all den schlaflosen Nächten, den Tagen voller Angst... [*After all the sleepless nights, days full of fear...*] (Mannheimer Morgen, 13.01.1996, COSMAS II)
- (2) Glücklicherweise brauchte die Frau nur einige **Tag**e im Krankenhaus zu bleiben. [*Luckily, the woman had to stay only a few days in the hospital*] (Mannheimer Morgen, 20.01.1996, COSMAS II)³

Example (1) shows that, semantically, *Tag* can be the direct opposite of *Nacht*. In example (2), however, *Tag* is used with a meaning that makes abstraction from the semantic difference between *Tag* and *Nacht*. In this latter instance it can be said that the use of *Tag* ‘neutralises’ the opposition. According to Coseriu, phonological and lexical neutralisation are alike: because the differentiating feature between the two terms of a neutralisable opposition loses its functionality in the case of neutralisation (e.g. ‘voice’ in the opposition *t/d* or ‘sunlight’ in the opposition *Tag/Nacht*)⁴, the term that is used in the neutralisation context (i.e. */t/*⁵ or *Tag*) can be defined as actualising only the features that are shared by both terms of the underlying functional opposition. Hence, this term can be analysed as including both terms of the opposition at the same time (or, to put it in structuralist terms, it has an ‘archiphonemic’ or ‘archisememic’ value, respectively). Coseriu extends the analogy to the field of grammar as well: for example, in many languages, masculine can be used in a gender-neutral sense (e.g. *dos alumnos* ‘two students’ in Spanish, which can refer to two male students or to a male and a female student, Coseriu 1992 [1988]: 213). Likewise, singular can be used to denote a plurality (e.g. *Der Deutsche ist so* in German, which could be paraphrased as ‘The German people are in general like that’, Coseriu 1992 [1988]: 217)⁶.

The term neutralisation can not only be found in structuralism but also in other approaches to language. Within the cognitive paradigm, the term neutralisation is found in Haiman (1980), who defines neutralisation as “many deep structures, one surface structure” and confronts it with “diversification” (“many surface structures, one deep structure”). For example, the morphosyntactic identity of the protasis in English *If it is true, I’ll eat my hat* with the interrogative subclause in *I don’t know if it is true* is analysed as a case of neutralisation. The central argument is that “a meaning common to both constructions” (Haiman 1980: 518) is to be assumed (for a discussion, see Willems 2005). According to Verstraete (2005), English sentences with a hypotactic structure such as *John was imprisoned after he robbed the bank* are characterised by syntactic neutrali-

³ COSMAS II (Deutsches Referenzkorpus, DeReKo) is currently the largest machine readable corpus of present-day German made available by the *Institut für Deutsche Sprache* (Mannheim).

⁴ For discussion, see chapter two and three.

⁵ Or better */T/* referring to */t/* as a representative of the archiphoneme (cf. chapter one).

⁶ Thus, from a Coserian point of view, by using singular instead of plural, the ‘plurality’ of individuals is represented as a unity.

sation. The difference between the three basic subclauses (“declarative”, “interrogative” and “imperative”) is said to be cancelled out and the declarative subclause is used in the context of neutralisation as the unmarked option of the paradigm (sentences such as *John was imprisoned after didn’t he rob the bank?* and *John was imprisoned after do keep in mind that he robbed the bank!* are not possible). Within Head-Driven Phrase Structure Grammar, Levy and Pollard (2002) refer to “argument neutralization” in sentences such as *Er findet und hilft Frauen (*Männer/*Kinder)*. An utterance such as *Kim is a Republican and proud of it* is considered to be an example of “functor neutralization”. Miestamo (2005), treats neutralisation with respect to negative sentences from a typological perspective. He points out that in some languages the affirmative paradigm distinguishes between realis and irrealis. However, in negative sentences, only marking of irrealis is possible which may be analysed as a case of neutralisation. In generative grammar, finally, Putnam & Salmons (2013), building on Legendre (2009), argue in favour of a ‘syntactic neutralisation’ approach with respect to the loss of passive voice constructions in Moundridge Schweitzer German, a moribund enclave dialect spoken in South Central Kansas. Instead of the passive voice, the Moundridge German speaker uses a structure that is closest to a passive voice construction within the same grammar, which, according to the authors, can be seen as a case of neutralisation.

One immediately notices that, once the term neutralisation has been extrapolated beyond the field of phonology and the term has been applied within different theoretical paradigms (structural-functional, cognitive, generative, etc.), it has been used to refer to a range of disparate phenomena. A *first research question* that logically follows is whether the arguably different phenomena described in the literature should all be subsumed under the heading of “neutralisation” or sometimes should be better explained in terms of other concepts. This topic is addressed in chapter one.⁷ The chapter is essentially a lexicographic expedition through the relevant literature in 20th-century linguistics, registering the many actual uses and varied interpretations of the term neutralisation.

After a discussion of the notion of neutralisation as developed in the writings of Trubetzkoy, the chapter examines the use of the term neutralisation outside the domain of phonology in a chronological way. First, Hjelmslev’s view (1971 [1939]) on neutralisation is discussed. Second, an overview is given of the use of the term in the 1950s (discussing authors such as Cantineau 1952, Prieto 1954, Ruipérez 1954, Godel 1955, Lampach, 1956 and Garvin 1958). And third, the use of the term neutralisation from the 1960s onwards is investigated, distinguishing nine different senses of neutralisation (with various sub-senses). The outcome of this undertaking is that the use of the term neutrali-

⁷ The chapter was published as an article entitled: De Backer, Maarten. 2009. The concept of neutralisation outside the field of phonology. In: *Indogermanische Forschungen* 114, 1-59.

sation should be confined to a particular type of linguistic phenomenon, in order to prevent it from becoming a next to meaningless term in linguistic inquiry.

1.3 Neutralisation in the writings of Coseriu

“Da es sich bei der Neutralisierung um eines der für die „natürlichen Sprachen“ (d.h. ganz einfach für die Sprachen) charakteristischsten Dinge handelt, müßte sie noch viel genauer untersucht werden.” [As neutralisation is one of the most characteristic things of the „natural languages“ (or simply, of the languages) it should be investigated more thoroughly.]

Coseriu (1992 [1988]: 225)

The above statement shows that, for a linguist like Coseriu, neutralisation is fundamental to linguistic inquiry. Unsurprisingly, Coseriu incorporates neutralisation as one of the four cornerstones of his linguistic theory, besides the principles of functionality, opposition and systematicity (Coseriu 1992 [1988]: 171-172). In the context of the present dissertation, it was particularly the pre-eminent role Coseriu ascribes to neutralisation that aroused my interest to further explore the topic. The basic features of Coseriu’s principle of neutralisation can be summarised as follows:

- First, neutralisation is regarded as an important restriction to the structuralist premise that linguistic items derive their functional value from the systemic, paradigmatic oppositions in which they take part. The principle of neutralisation shows that the functionality of these oppositions may be cancelled in certain contexts in discourse.
- Second, neutralisation essentially involves the inclusion of one linguistic item in another: in the case of neutralisation, one member stands for what is common to both members of the neutralisable opposition, thus including the other member of the opposition as well. This view entails that the voiceless plosive /t/ in *Bund* ‘association’ or *Tag* in *einige Tage im Krankenhaus bleiben* ‘to stay in the hospital for a few days’ should be analysed as being functionally different from /t/ in German *tanken* ‘to refuel’ (where it may contrast with *danken* ‘to thank’) or *Tag* in contexts where it is in explicit or implicit contrast with *Nacht*.
- Third, neutralisation is considered to be unidirectional, viz. only one of the terms may neutralise the opposition, not the other. Importantly, the direction of neutralisation is described as being motivated by the structure of neutralisable oppositions on the level of the language system (Coseriu 1992 [1988]: 220): in neutralisable

oppositions, a positively defined (or ‘marked’) term is opposed to a negatively defined (or ‘unmarked’) term. Because of its negative characterisation, the negative or unmarked term can be used in both an oppositional sense and a neutral sense, whereas the marked term is excluded from such usage. Accordingly, Coseriu distinguishes between ‘neutralisability’ and ‘(actual) neutralisation’: whereas the former refers to the ‘potential’ for neutralisation motivated by the asymmetric structure of certain systemic oppositions, the latter refers to the actual neutralisation in specific discourse contexts. Neutralisable oppositions are schematised as follows (Coseriu 1992 [1988]: 218; this scheme will recur in various ensuing chapters):

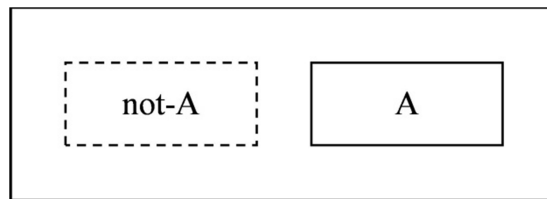


Figure 1: Neutralisation according to Coseriu

- Fourth, in semantics, the unmarked term of neutralisable oppositions is analysed as having two meanings, or *signifiés*. *Tag*, for instance, has a specific-oppositional meaning (*Tag* in the sense of ‘part of a 24-hour period characterised by the presence of sunlight’) and a neutral-generic meaning (*Tag* in the sense of ‘24-hour period’).
- And fifth, neutralisation is taken to recur at various levels of language in a systematic and analogous way (viz., in phonology, lexicon and grammar)⁸.

From the above sketch, a *second set of research questions* follows. A first question is whether neutralisation in the field of semantics is always unidirectional, as this is typically the case for phonological neutralisation. Or are there cases where the opposition may be neutralised by both terms of the opposition?

A second question is whether the claimed ‘bifunctionality’ of unmarked terms (i.e. their potential for having both an ‘oppositional’ and a ‘neutral’ meaning) is reconcilable with the structuralist tenet that language-specific meanings are monosemous, i.e. have one unitary and homogeneous meaning on the level of the language system (“langue” in Saussurean terms). These two questions are particularly addressed in chapter three.⁹ On the one hand, the chapter explores the possibility of an alternative structural-functional

⁸ Coseriu argues that neutralisation even exists on a pragmatic level. Coseriu gives the example of “foreigner talk”, where a German sentence such as *Du kommen mein Haus, dort zusammen trinken* ‘you come my house, there drink together’, in the context of a German speaker talking to an immigrant, will not be qualified as incorrect since the incorrectness is considered necessary and appropriate, thus ‘neutralising’ any judgments of linguistic (in)correctness (Coseriu 1985: 35). In chapter one, I argue that an analysis of this phenomenon in terms of neutralisation is infelicitous.

⁹ This chapter was published as: De Backer, Maarten. 2010. Lexical neutralisation: a case study of the lexical opposition ‘day’/‘night’. In: *Language Sciences* 32 (5), 545-562.

approach to the semantic variation of the unmarked term that is more consistent with the structuralist postulate of unitary and homogeneous meanings in the language system. On the other hand, the question of unidirectionality is addressed with regard to the lexical example *Tag/Nacht*, using historical and current corpus data. The analysis shows that the principle of unidirectionality might be valid for present-day German but it does not account for earlier stages of German and other Germanic languages (diachronic argument). In addition, contrastive examples taken from Basketo, a non-European language, show that the unidirectional neutralisation relation between the lexical units for ‘day’ and ‘night’ does not hold universally and that bidirectional neutralisability also occurs in the world’s languages (typological argument).

A third question concerns the ‘system-bias’ inherent to Coseriu’s description of neutralisation. By seeing neutralisation as a principle that is operative at various levels of language in a similar way, Coseriu conceives of neutralisation as a linguistic mechanism that is motivated by language-internal factors only, as if the linguistic oppositions themselves ‘immanently’ generate the potential for neutralisation. Particularly in the concluding chapter, I will come back to this issue, arguing that language-external factors also need to be taken into account when describing neutralisation phenomena.

1.4 Neutralisation vs. markedness theory

Reading up on the literature on neutralisation and related phenomena, it soon became clear that the notion of neutralisation is, for many authors, closely connected with the notion of markedness (or, better still, to some particular notion of markedness). Moreover, what Coseriu describes under the heading of neutralisation, is very often subsumed under the term markedness without any reference to the notion of neutralisation, particularly by authors who do not subscribe to a structural-functional approach to language. In this dissertation, I do not aim to give a detailed overview of the literature on the notion of markedness. For in-depth discussions I refer to existing comprehensive accounts such as Greenberg 2005 [1966], Eckman, Moravcsik and Wirth (1986), Tomić (1989), Andrews 1990, Battistella (1990, 1996), Andersen (2001, 2008), and Haspelmath (2006), among others. Instead, I focus on the notion of markedness as developed by Jakobson and compare it with Coseriu’s notion of markedness in the context of the latter’s neutralisation theory, as this is of more relevance to the thematic scope of the dissertation. The discussion focuses on the notion of markedness in the field of semantics. The question of the

difference between Jakobson's and Coseriu's notion of (semantic) markedness is addressed in chapter two.¹⁰ It is shown that whereas Jakobson defines the marked/unmarked opposition as a contrast between the plus-value of a feature and a corresponding zero-value (A vs. ØA), Coseriu describes the opposition as a contrast between the plus-value of a feature and the minus-value of that feature (A vs. not-A). The central claim of the chapter is that a rigid application of either Jakobson's or Coseriu's descriptive model to all lexical and grammatical relations fails to recognise the fact that *different* semantic oppositions may present *different* markedness relations. To substantiate this claim, ten lexical pairs of nouns in German are investigated by means of a corpus study and two off-line experiments, viz. a sentence processing task and a questionnaire. On the basis of the data analysis, a revised semantic markedness model is outlined that accounts for the observed variation in a more satisfactory way.

A related question concerns the relation between the concept of neutralisation, on the one hand, and other concepts that have been used (sometimes only occasionally) to describe neutralisation phenomena, particularly within cognitive semantics (e.g. polysemy, metonymy, autosuperordination, autohyponymy, prototype effects; cf. Langacker 1987; 1991, Lakoff 1987, Talmy 1988, Geeraerts 1985; 1997, Taylor 1999, Cruse 2000; 2011, among others). This topic is also touched upon in various other chapters.

1.5 Neutralisation of gender oppositions: the interpretation of masculine personal nouns

The final chapter is concerned with the interpretation of masculine personal nouns.¹¹ It is a well-known fact that masculine personal nouns can be used either generically, i.e. referring to both women and men, or specifically, i.e. referring to only men. The potential of masculine personal nouns to refer to males only or to both female and male persons has been addressed in linguistics within the contexts of neutralisation (Coseriu 1976, 1992 [1988]) and markedness (Jakobson 1971 [1932], 1971 [1936]; Greenberg 2005 [1966];

¹⁰ The chapter is published as the article: De Backer, Maarten. 2013. Neutralisation and semantic markedness: A study into types of lexical opposition. In: *Sprachwissenschaft* 38 (3), 343-382.

¹¹ The chapter is published as the article: De Backer, Maarten & Ludovic De Cuypere. 2012. The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study. *Language Sciences* 34 (3). 253-268.

Waugh 1982; Andersen 2001, 2008).¹² This chapter takes a contrastive perspective and investigates the difference in interpretation of masculine personal nouns in German and Dutch. Regarding German, research findings indicate that generic uses of masculine personal nouns are strongly male-biased in comparison with alternative generics (Klein 1988, Scheele & Gauler 1993, Irmen & Köhncke 1996, Braun et al. 1998, Stahlberg et al. 2001, Stahlberg & Sczesny 2001, Steiger & Irmen 2011). In Dutch, masculine terms and neutralising terms are reported to be increasingly used in reference to both women and men (Gerritsen 2002). The chapter investigates, by means of two survey experiments, (i) how German and Dutch native speakers interpret masculine personal nouns used in referential contexts, (ii) which variables this interpretation is associated with (including subject gender, number, definiteness, type of lexical unit and relative frequency), and (iii) how the participants evaluate the referential possibilities of these nouns.

Firstly, the results of the study indicate that masculine personal nouns are more frequently interpreted as gender-specific terms in German than in Dutch. Secondly, the interpretation of the German and Dutch nouns is found to be significantly associated with the following variables: number, lexical unit type and relative frequency. Thirdly, German masculine personal nouns appear to be more restrictive in terms of potential references than their Dutch counterparts. In general, the data indicate that there is a clear difference between German and Dutch regarding the interpretation of masculine personal nouns, but this difference is particularly apparent in the singular.

1.6 Concluding chapter

In the concluding chapter, the insights obtained from the various case studies are summarised and brought together. In addition, I briefly elaborate on some of the major alternative analyses proposed in the ‘anti-markedness’ literature, as this is not covered in one of the case studies.¹³ On the basis of this overview of alternative approaches and the results obtained from the various case studies in the previous chapters, Coseriu’s neutralisation theory is reviewed with a critical mindset. To round off the conclusions, I sketch a revised account of neutralisation/markedness in the field of semantics which, while

¹² In neutralisation theory, the peculiar type of relationship between the members of a neutralisable pair (e.g. *day* vs. *night* or *masculine* vs. *feminine*) is also accounted for in terms of markedness. However, because the neutralisation and markedness theories differ in their descriptions of what is marked and unmarked in semantics, the concepts have also to be kept apart terminologically.

¹³ As will become clear from the case studies, the ‘anti-markedness’ argumentation is also relevant to Coseriu’s concept of neutralisation.

bearing testimony to the value of Coseriu's approach, also tries to overcome some of its drawbacks.

1.7 Contribution

The present dissertation is based on four published articles. The original texts of the articles have not been changed in the dissertation. Their lay-out, however, has been adapted conforming to the style sheet of doctoral dissertations at Ghent University. The introductory chapter and the final chapter have not been previously published. The research reported on in chapter four is the result of a close collaboration with Ludovic De Cuypere, who helped me to carry out the statistical analyses. The interpretations of the data, the statements made and the views expressed in this dissertation are solely my responsibility. The dissertation consists of the following chapters:

Introduction

Chapter 1. The concept of neutralisation outside the field of phonology

De Backer, Maarten. 2009. The concept of neutralisation outside the field of phonology. In: *Indogermanische Forschungen* 114, 1-59.

Chapter 2. Neutralisation and semantic markedness: An inquiry into types of lexical opposition in German

De Backer, Maarten. 2013. Neutralisation and semantic markedness: A study into types of lexical opposition. In: *Sprachwissenschaft* 38 (3), 343-382.

Chapter 3. Lexical neutralisation: a case study of the lexical opposition 'day'/'night'

De Backer, Maarten. 2010. Lexical neutralisation: a case study of the lexical opposition 'day'/'night'. In: *Language Sciences* 32 (5), 545-562.

Chapter 4. The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study

De Backer, Maarten & Ludovic De Cuypere. 2012. The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study. *Language Sciences* 34 (3). 253-268.

Overall conclusions

Chapter 1

The concept of neutralisation outside the field of phonology

Historically, the term neutralisation originated in the field of phonology, yet it has also become widely used in the field of meaningful units. The goal of this paper is twofold. Firstly, it traces the origins of the different ways the term has been used in the field of meaningful units, viz., lexicon, grammar, and discourse, in 20th-century linguistics. Secondly, it determines the extent to which it is theoretically reasonable to use the term for the variety of phenomena that have come under its extension. In the introductory section, the focus is on the notion of neutralisation as developed by the Prague School of Linguistics, particularly in the writings of Trubetzkoy. In the second part of the paper, the use of the term neutralisation outside the domain of phonology is examined chronologically: first, Hjelmslev's view on neutralisation is discussed (§ 1.3.1), then an overview is given of the use of the term in the 1950s (§ 1.3.2 and § 1.3.3), and then the third section deals with the notion of neutralisation from the 1960s onwards. In this final section, nine different senses of neutralisation (with various sub-senses) are distinguished. In order to prevent neutralisation from becoming a vacuous or superfluous term in linguistics, I argue that its use should be confined to a particular type of linguistic phenomenon, and that some of the concepts that it has denoted in 20th-century linguistics should be better expressed by other (either already existing or new) terminology.

1.1 Introduction

The concept of neutralisation was first described systematically in morpho(pho)nology by members of the Prague Linguistic Circle (Trubetzkoy 1929, 1931, 1932, 1933, 1936a, 1936b and 1939; Mathesius, 1929; Jakobson 1971 [1939] and 1971 [1940]; Trnka 1982 [1938] and De Groot 1940) and other structuralists (such as Martinet 1936 and Hjelmslev 1971 [1939]) in the 1930s, in order to deal with restrictions on the occurrence of phonological units in certain positions within the words of a language (Brasington 1994: 2784)¹. Originating in the writings of (European) structuralist linguists, who viewed language as a systematic network of relations in which each unit is functionally determined by virtue of its place it occupies within a system of oppositions, the concept specifically arose from preoccupations with structure (Stankiewicz 1991: 13) and concomitant structuralist notions such as oppositionality, systematicity, and functionality (cf. Martinet 1968: 1-3 or Coseriu 1992 [1981]: 172; 212, who also notes that the principle of neutralisation is a particularity of European structuralism). By way of introduction, I will limit myself in the first section to Trubetzkoy's conception of phonological neutralisation for two reasons: first, there already exists an extensive and complex (both primary and secondary) literature on the concept of neutralisation in phonology,² so a detailed discussion of the concept of neutralisation in phonology would go beyond the scope of this article, which lies within the field of meaningful units; and second, for most 20th-century linguists working with the notion of neutralisation, both within and outside the field of phonology, Trubetzkoy's remarks on neutralisation serve as a reference point in developing their own ideas. In particular, I will focus on Trubetzkoy's theory of neutralisation as presented in *Grundzüge der Phonologie* (1939), Trubetzkoy's magnum opus, in which his ideas first developed in earlier works are synthesised and/or revised.

¹ Strictly speaking, the "term" neutralisation was not used until 1932. Trubetzkoy (1929: 122ff.) already points to the fact that in certain positions there is no opposition between two phonemes, because one or the other simply cannot occur in a particular environment, but he does not yet speak of neutralisation. Similarly, Mathesius, in his 1929 article, states that the functional difference between voiced and voiceless consonants in Czech and German is eliminated in word-final position (1929: 81), without, however, using the term neutralisation explicitly. Trubetzkoy (1931: 98ff.) discusses the notion of archiphoneme when dealing with the loss of the distinctive character of a phonological opposition in certain positions. Jakobson (1929: 8-9) defines the notion of archiphoneme, but does not associate it at all with the notion of neutralisation (cf. Akamatsu 1988: 228). Furthermore, Trubetzkoy almost always uses the term "Aufhebung" (suspension), instead of "Neutralisierung" (neutralisation) in his writings.

² Thorough discussions of neutralisation and the archiphoneme can be found in Bazell (1956), Davidsen-Nielsen (1978), Akamatsu (1988), Schmidt (1989: 3-44) and Brasington (1994).

1.2 Neutralisation in phonology: Trubetzkoy

In Trubetzkoy's view, neutralisation is to be understood as the suspension, in certain contexts, of an otherwise operative phonological opposition between phonemes, resulting in the non-functionality of that opposition (for example, the suspension of the opposition between /t/ and /d/ in word-final position in German).³ For Trubetzkoy, a neutralisable opposition is necessarily bilateral ("eindimensional" – Trubetzkoy 1939: 61), i.e. both terms have a common base (definable in terms of relevant features), which is not shared by any other phoneme or phonemes of the same phonological system. In order to account for the fact that in the position of neutralisation a phonological opposition no longer exhibits its functional validity, i.e. is no longer able to distinguish meaning, Trubetzkoy postulates an additional distinctive unit, viz., the so-called archiphoneme, which he phonologically defines as that unit that consists of the relevant features common to the member phonemes of a neutralisable opposition (1939:71). Trubetzkoy devotes much of his discussion to the interpretation of the sound in the position of neutralisation. In an attempt to reconcile his rather conflicting views that the sound occurring in the neutralising position should be interpreted as (a) the unmarked member of an opposition (1931) or (b) as the archiphoneme itself (1933) (cf. Davidsen-Nielsen 1978: 29), Trubetzkoy introduces the notion of archiphoneme representative (already in 1936, and adopted in the final version of his theory of neutralisation in 1939). In this view, the archiphoneme is said to be represented at a less abstract but still phonological level by an archiphoneme representative, which, in turn, is said to be realised, from a phonetic point of view, either by

- (1) a sound that is phonetically different from the realisations of the member phonemes of the neutralised opposition (in many cases an intermediate sound – a "Mittelding" [Trubetzkoy 1939: 72]), or

³ It is worth noting that Jakobson, after having embarked on his theory of the distinctive feature after Trubetzkoy's death in 1938, developed a different view on neutralisation and phonological theory in general. In his view, the phenomenon of neutralisation should not be described at the phoneme level, as Trubetzkoy did, but at the feature level (Jakobson 1962 [1959]: 534f., 1962 [1962]: 646-647; 650, and Jakobson and Waugh 1987 [1979]: 31): in opposition to Trubetzkoy, who held that neutralisation refers to the situation, in which the distinctive function of a phonemic opposition is suppressed in a particular context, Jakobson posited that neutralisation entails the suppression of a (distinctive) feature (opposition) in particular syntagmatic environments/positions (cf. Andrews 1990: 140). Jakobson further elaborated and revised his theory of phonological neutralisation in his American period, particularly under the influence of acoustic phonetics, communication (information) theory and cybernetics, and in close collaboration with Halle and Fant (cf. Jakobson, Fant and Halle 1965 [1952], or Jakobson and Halle 1956). However, Jakobson's notes on neutralisation in phonology seem to have been less influential to those working with the concept of neutralisation outside the domain of phonology.

- (2) a sound that is phonetically identical to the realisation of only one of the member phonemes of the neutralised opposition, the choice of which is internally determined, or
- (3) a sound that is phonetically identical to the realisation of one or the other member of the neutralised opposition, the choice of which is externally determined, i.e. under the influence of neighbouring phonemes (Trubetzkoy 1939: 71ff. – cf. Martinet 1968: 3-4).⁴

Since in most instances the choice of the archiphoneme representative is not externally but internally determined according to Trubetzkoy, he argues that neutralisable oppositions should be described as oppositions between a marked (“merkmalhaltig”) and an unmarked (“merkmallos”) term (Trubetzkoy 1939: 73). Trubetzkoy’s notion of markedness allows for phonological units to be distinguished from one another by means of the presence and absence of some feature (or by the maximum and minimum of some feature), and, as such, is applicable only to logically privative neutralisable phonological oppositions (Trubetzkoy 1939: 69-73)⁵. For Trubetzkoy, the internal structure of a neutralisable opposition is such that the member phonemes are to be analysed as ‘archiphoneme + zero’ and ‘archiphoneme + a specific feature’, respectively (Trubetzkoy 1939: 73). In other words, one member is supposed to stand in for both itself and for that which is common to the member phonemes of the neutralisable opposition, i.e. the archiphoneme. Accordingly, it is typically the unmarked member that allegedly represents the archiphoneme and is realised in the position of neutralisation.

However, what is theoretically decisive for Trubetzkoy is not the way in which the archiphoneme representative is realised, but rather the fact that a phonological opposition is in certain positions no longer functionally relevant. It is exactly because of this absence of phonological contrast that the sound occurring in the position of neutralisation is phonologically characterised only by what is common to both terms of the opposition (in a case like /t/ and /d/, the sound that is produced in the position of neutralisation only expresses ‘dentality’, ‘orality’ and ‘occlusivity’). This fact, for Trubetzkoy, is also psychologically motivated in the linguistic consciousness of the speaker, for whom the sound uttered in the position of neutralisation is said to acquire, whatever its phonetic realisation, the form of a “Gestalt” (Trubetzkoy 1929: 122), from which the specific differentiating features (i.e. those features by virtue of which the phoneme stands in direct opposition to another phoneme) are abstracted.

⁴ Trubetzkoy (1939: 74) distinguishes still other types (such as a combination of the second and third types). Also, Martinet (1968: 3) adds some other types of possible archiphoneme representatives (such as a sound that is phonetically identical to the realisation of one or the other member phoneme of the neutralised opposition, the choice of which is dependent upon the “spirit” of the moment, i.e. the choice of the speaker). I will not go into these details any further here. I have only mentioned them to show that Trubetzkoy’s list is not exhaustive and is susceptible to refinement and further elaboration.

⁵ For a discussion of logically privative, gradual, and equipollent oppositions, see Trubetzkoy (1939: 69).

Important for our later discussion of neutralisation outside the field of phonology is Trubetzkoy's distinction between, on the one hand, "neutralisation" and, on the other hand, the "neutrality" of a phoneme as to a specific feature (opposition), which is relevant for other phonemes of the same phonological system (Trubetzkoy 1929: 123 – for the latter phenomenon, generative phonologists later coined the term segment redundancy, i.e. the case where some feature values may be predicted on the basis of others within the same segment – see also Davidsen-Nielsen 1978: 25). For example, in many languages, nasals are in all positions phonologically neutral as to the relevant features 'voiced' and 'voiceless', i.e. the voice correlation does not exist because there are no voiceless nasals (see also Schmidt 1989: 10).⁶

The merit of Trubetzkoy's approach is that it does not suggest any contrastive possibilities in positions where such possibilities are nonexistent. After all, the claim, for example, that the opposition between /t/ and /d/ simply does not exist in word-final position in German, is entirely coherent from a structural point of view. The notion of archiphoneme, however, has met with various reactions (as has the notion of archiphoneme representative, for that matter), even among the members of the Prague Circle. In particular, Trubetzkoy's suggestion that the unit appearing in the position of neutralisation is at the same time an archiphoneme *and* the unmarked member of a neutralisable opposition has been criticised as being neither clear nor convincing (cf. Akamatsu 1976 and Davidsen-Nielsen 1978: 30). Trubetzkoy's insistence on the neutralisability of only bilateral oppositions has also been questioned (Martinet 1936: 54, Cantineau 1955, among others). For a discussion of the various modifications to Trubetzkoy's theory of neutralisation and of the delimitation of the concept of neutralisation from other related phonological phenomena (such as defective distribution, transfer of distinctive features or neutrality), I refer to Schmidt (1989: 13-23).

In the following section, I will deal with the first attempts to extrapolate the notion of neutralisation to the field of meaningful units. First, Hjelmslev's conception of neutralisation is commented upon. Second, the use of the term neutralisation in the 1950s is addressed (in particular, the following authors are taken into consideration: Cantineau, Prieto, Ruipérez, Godel, Lampach, Garvin). Finally, Martinet's questionnaire of 1957 is briefly discussed.

⁶ For Jakobson (1971 [1940]: 222), this phenomenon is a kind of "zero opposition", where the opposition between two relevant features is suspended in a certain phoneme.

1.3 The first attempts to extrapolate the concept of neutralisation to the field of meaningful units

1.3.1 Hjelmslev on neutralisation

Already Trubetzkoy (1936a: 13) mentions in passing that neutralisable oppositions are not restricted to the domain of phonology. Similarly, Jakobson (1971 [1939]: 219 and 1971 [1940]: 222; cf. Schmidt 1989: 48-49) notes that oppositions between meaningful units can be suppressed under the constraint of a given syntagmatic context, a phenomenon that he calls “kombinatorische Neutralisation” and that he distinguishes from the “Aufgehobensein” of an opposition at the level of *langue* (i.e. the simple absence of an opposition, corresponding to Trubetzkoy’s neutrality). One of the first linguists to explicitly address the question of which of these types of situation can be considered to constitute the counterpart of the neutralisation of phonological oppositions in the field of meaningful units is Hjelmslev. In his 1939 article on neutralisable oppositions, Hjelmslev draws a parallel between, on the one hand, the suppression of the opposition between the “cenematic” units /t/ and /d/ in word-final position in Russian and, on the other hand, (1) the “syncretism” of nominative and accusative in the Latin neuter, and (2) the “syncretism” of genitive and dative in German after the preposition *längs* (*längs des Strandes* and *längs dem Strande* being synonymous). For Hjelmslev, neutralisation essentially involves the fusion of two functional “forms” (Hjelmslev 1971 [1939]: 93). Depending on the way in which this merging of two units is manifested at the level of “substance”, two types of neutralisation are distinguished: in the first type – which Hjelmslev calls “implication” – neutralisation is manifested by the replacement of one unit by another; in the second type – which he calls “syncretism” – neutralisation is manifested by the total fusion of the two units (Hjelmslev 1971 [1939]: 94).⁷ Interestingly, for Hjelmslev, the units that fuse/syncretise in the domain of “plerematics” are morphemes (Hjelmslev 1971 [1939]: 94), i.e. (in Hjelmslev’s sense) elements of meaning, such as masculine, singular, nominative, genitive, etc. This means that the merging of two units in the domain of “plerematic units” in the first place affects the *signifiés* rather than the *signifiants*. Within the field of meaningful units, two subtypes of neutralisation/syncretism are distinguished: either the merging of two *signifiés* is accompanied by a

⁷ Hjelmslev also notes that, although an “implication” is a typical phenomenon of the “cenematic” level and “syncretism” is characteristic of the level of “plerematics”, an “implication” is also possible at the “plerematic” level (e.g. in French, the pronoun *moi* [“strong emphasis”] must be used after prepositions instead of *me* [“weak emphasis”], and *me* is considered to be implied in *moi* – Hjelmslev 1971 [1939]: 95), and vice versa (e.g. in Russian, the vowel [ə] is a syncretism of *a* and *o* – Hjelmslev 1971 [1939]: 95)

coalescence of the corresponding formal expressions (as in example (1), nominative and accusative having fused into one single form), or the fusion of two *signifiés* does not result in them becoming formally identical (as in example (2), *längs des Strandes* and *längs dem Strande* are absolutely synonymous, but remain formally distinct).

A few remarks should be made: first, Hjelmslev does not come up with a *new* type of situation in the domain of meaningful units that could fall under the general heading of neutralisation, but, instead, he establishes a link between the phenomenon of neutralisation as described in phonology and a phenomenon for which another term had already been coined in linguistics, viz., syncretism. However, the notion of syncretism is generally defined as the historically determined formal identity of different functions within (a section of) a paradigm (i.e. as a case of “inflectional homophony” – Baerman et al. 2005: 7; see also Martinet 1968: 9-10 or Coseriu 1992 [1981]: 226) and many scholars make a strict distinction between the phenomena of syncretism and neutralisation. In Hjelmslev’s terminology, syncretism refers to a particular type of neutralisation, viz., the total fusion of two units. Hjelmslev’s example of the Latin neuter is also called syncretism by those linguists who draw a distinction between the two concepts, but for them, the syncretism simply consists in the formal collapse of the two different functions, nominative and accusative. Hjelmslev, on the other hand, uses the term syncretism to refer to an underlying semantic homogeneity of the nominative and accusative forms in the Latin neuter nouns. As Martinet (1968: 11) remarks, the formal identity of nominative and accusative neuter nouns might indeed point to a semantic and/or syntactic affinity, but according to Martinet, this non-differentiation should be interpreted as a remnant of earlier non-attested stages of (in this case the Latin) language. From a synchronic point of view, nominative and accusative are simply homonymous in the Latin neuter nouns, but that is not to say that a contemporary speaker of Latin is not aware of the functional difference between nominative and accusative. Rather, when the grammatical gender of the noun is neuter, he has only one form at his disposal.

Secondly, it should be noted that Hjelmslev’s examples of neutralisation/syncretism in the field of semantics are differently conditioned: whereas the suppression of nominative and accusative is paradigmatically determined (within the declensional class of the Latin neuter nouns), the suppression of genitive and dative is syntagmatically determined (in combination with the preposition *längs*). Although the latter example does meet the condition of syntagmatic determination (which is typical of Trubetzkoyan phonological neutralisation), for the sake of clarity it would be preferable to use the term “contextual synonymy” or “free choice” in this case, since none of the other conditions (only one of the terms can occur in a particular environment, which stands for both itself and the other

term of the opposition)⁸ are fulfilled. After *längs*, the dative and genitive are simply variants expressing the same referential meaning.

Of particular theoretical interest is Hjelmslev's introduction of the notions of "intensive term" and "extensive term" (Hjelmslev 1971 [1939]: 96), which Coseriu, in particular, included in his theory of neutralisation (Coseriu 1976d: 59). Hjelmslev describes the relation between the terms of a neutralisable opposition as a particular type of uni-directional inclusive relationship of participation, where the reference potential of one term includes that of another (as opposed to exclusive relationships, in which the reference potential of each term excludes that of its opposite [cf. also Tomić 1989: 2]). "Extensive" applies to the unmarked term of a neutralisable opposition, in that it can be extended over the entire functional zone covered by both terms of the opposition, whereas "intensive" relates to the marked term, which is concentrated on one particular area of this zone.

1.3.2 The concept of neutralisation in the 1950s

Further attempts to extrapolate the concept of neutralisation to the domain of meaningful units were made in the 1950s, particularly by linguists working within the structural-functional framework elaborated by de Saussure and the Prague School of linguistics. The main concern of the authors was whether the equivalent of phonological neutralisation in the field of meaningful units was to be sought at the level of the *signifiants* or at the level of the *signifiés*.

1.3.2.1 Cantineau and Prieto

Cantineau (1952: 11- 40) and Prieto (1954: 134-143) argue that neutralisation occurs when an opposition between two *signifiants* disappears. In Cantineau's view, neutralisation can be determined lexically (in French, the opposition between the forms of 3rd person singular/3rd person plural is neutralised in *il mange/ils mangent*, but not in *il finit/ils finissent*), morphologically (in French, the same opposition is neutralised in all verbs in the imperfect and the conditional), or syntagmatically determined (in Hebrew, the formal opposition between *zâkar* 'he has remembered' and *zâkâr* 'male' is neutralised before a pause, where only the form *zâkâr* can occur). Prieto claims that only the syntagmatically conditioned type should be considered a case of neutralisation (e.g. the

⁸ Note that Trubetzkoy allows for a type of neutralisation where *both* terms can represent the archiphoneme (cf. § 1.2). However, it should be noted that the environments in which they occur are *different*, i.e. term A occurs in environment A; term B occurs in environment B. In Hjelmslev's example, on the other hand, both terms occur in the *same* environment (after the preposition *längs*).

difference between masculine [pəti] and feminine [pətit] is neutralised before a vowel where [pətit] always occurs – Prieto 1954: 140-141). It is clear that Cantineau and Prieto make no distinction between what is traditionally called homophony/homonymy and/or syncretism, on the one hand, and neutralisation, on the other.

1.3.2.2 Ruipérez

Ruipérez (1954: 1-35) considers Cantineau's and Prieto's purely formal conception of the phenomenon to be incomplete and erroneous (Ruipérez 1954: 33). He takes the view that the term neutralisation in the field of meaningful units should be used when the opposition between two *signifiés* has disappeared. Following Trubetzkoy, he emphasizes that neutralisations in morphology are only possible between two units that constitute a simple (or bilateral) opposition, i.e. between two directly opposed terms that share a common base and are differentiated on the basis of one single characteristic ("notion de base" – Ruipérez 1954: 14). Like Trubetzkoy and Hjelmslev before him, Ruipérez links the notions of markedness and neutralisation, paying particular attention to the bifunctionality of the unmarked term. One of the basic tenets of Ruipérez' reasoning is, that within a morphological opposition, one of the terms (the marked one) carries only a positive *valeur*, whereas the other term (the unmarked one) possesses, on the one hand, a negative *valeur* (i.e. the absence or negation of the distinctive property that is positively defined by the marked term) and, on the other hand, a neutral *valeur* (i.e. indifference towards the distinctive property) (see also Coseriu 1976d: 57 or 1992 [1981]: 218)⁹. Since, Ruipérez argues, as does Trubetzkoy, that in the position of neutralisation, there is no opposition between the positive and negative values of the respective terms of the neutralisable opposition, and only those features that are common to both members of the neutralisable opposition are relevant, the *valeur* of the unit that appears in the neutralising position needs to be a neutral one – called the "archivaleur" by Ruipérez (Ruipérez 1954: 27). The formal equivalent of the "archivaleur" of a neutralised opposition is called an "archimorpheme"¹⁰, whose form can be represented, from a theoretical point of view, either (1) by the morpheme of one of the terms of the neutralisable opposition (most frequently the morpheme of the unmarked term) or (2) by the morpheme of another independent unit (Ruipérez 1954: 27).

Ruipérez' theoretical position that the unmarked term of a morphological opposition has a double *valeur* is diametrically opposed to Jakobson's view, for Jakobson claims that the unmarked term possesses one unique *valeur*, viz., a neutral one (Jakobson 1971

⁹ For a historical overview and critical discussion of the concept of *valeur* in linguistic theories from the 18th century to the 1980s, see Haßler 1991.

¹⁰ At this point, Ruipérez differs from Hjelmslev, for whom "morphemes" are elements of meaning – cf. *supra*, § 1.3.1.

[1932]: 3-4). The use of the unmarked term with its oppositional meaning is, for Jakobson, a matter of discourse (*parole*) and not, as Ruipérez argues, a matter of the language system (*langue*) itself. In other words, whereas in Ruipérez' view the oppositional meaning of the unmarked term constitutes one of the two functions of the unmarked term, for Jakobson the oppositional meaning is a *parole*-meaning ("Redebedeutung" or "contextual meaning" in structural-functional terminology) determined by the verbal cotext and/or situational context.

Although for Ruipérez the crux of neutralisation is to be situated at the level of the *signifiés*, he remarks, like Hjelmslev, that the phenomenon has repercussions on the level of the *signifiants* as well: given the bilaterality of the linguistic sign, in those positions where an opposition between two *signifiés* is lost (i.e. in positions of neutralisation), at the same time an opposition between two *signifiants* disappears (Ruipe  rez 1954: 27). Importantly, Ruip  rez emphasizes that neutralisation entails the non-existence of an opposition, and not simply the non-occurrence of one of the terms of an opposition (which would be a case of "defective distribution" – cf. also    1.4.1.2).

In spite of its theoretical rigour, Ruip  rez' account does not contain many convincing examples. Rather surprisingly, Ruip  rez, like Hjelmslev, cites the identity of the Latin neuter nouns in the nominative and accusative case as an illustration of the phenomenon of neutralisation outside the domain of phonology (e.g. lat. nom. and acc. sg. *mare* – Ruip  rez 1954: 28). This is all the more remarkable in view of the fact that he draws a sharp distinction between the phenomenon of neutralisation and what he calls "coincidence" (i.e. "identit   formelle de deux unites, quand cette identit   est conditionn  e phoniquement", e.g. lat. gen. sg. and nom. pl. *equi* as compared to gen. sg. *consulis*/nom. pl. *consules* – Ruip  rez 1954: 31-32), under which also falls the phenomenon of case syncretism. Specifically, it is not clear how the example of the Latin neuter nouns matches with his theoretical description of neutralisation: which of the terms of the opposition should be considered to be the marked and unmarked one, respectively – nominative or accusative? What kind of "archivaleur" is realised in the position of neutralisation? Ruip  rez also discusses neutralisation in the context of an opposition between two relevant features that lose their relevance in combination with other relevant features within a single unit (e.g. in the Greek word *leips  *, the features 'future', 'active', '1st person singular', 'let' serve as a trigger for the neutralisation of the opposition present/aorist – Ruip  rez 1954: 19).

It is clear from the examples that Ruip  rez confines himself to cases where the neutralisation is paradigmatically conditioned (which is different from the classical theory of neutralisation, as developed in phonology). Interestingly, in Martinet's questionnaire of 1957 (cf.    1.3.3), Ruip  rez reanalysed his first example as a case of homonymy and his second example as a case of incompatibility.

1.3.2.3 Godel

Godel (1955: 34-44) tries to bring terminological clarity into the discussion by making a distinction between syncretism, latent opposition and neutralisation. According to him, the term syncretism should be restricted to the historically determined disappearance of the difference between originally distinct inflectional forms, through the merger of their *signifiants*. The phenomenon of latent opposition, then, is the static, synchronic result of a partial syncretism (i.e. when the formal coalescence is limited to certain conjugational series), and refers to the homophony of two semantically distinct units. The term neutralisation is defined as the suppression of an opposition between grammatical units in a certain synchronic state of language (Godel 1955: 36). In Godel's view, neutralisation occurs in Latin infinitive propositions, where the opposition between nominative and accusative is suspended, the subject of the proposition bearing the same case as the direct object, i.e. accusative. As in Ruipérez' theory, Godel argues that neutralisation affects the totality of the linguistic sign, in that it results in the two opposing terms becoming both formally and semantically identical. Unlike Ruipérez, however, Godel restricts the concept of neutralisation to the situation in which the suspension of the opposition is syntagmatically determined. Godel too revised his view on neutralisation in Martinet's 1957 volume, where he claims that the difference between subject and object in infinitive propositions is still relevant in spite of their identity in form (the same view was also expressed by Lampach in 1957 [Martinet, ed. 1957: 191f.], who further argues that in Latin infinitive propositions there is no archimorpheme for which the features 'subject' and 'object' have become irrelevant – see also Schmidt 1989: 55). The changes of opinion in the writings of Ruipérez and Godel are clear indications of the difficulties connected with a rigid application of the notion of neutralisation as elaborated in the domain of phonology to the field of meaningful units.

1.3.2.4 Lampach

Lampach (1956: 51-66) considers an opposition to be neutralised when in certain "grammatical contexts" only one of the members of the opposition appears. In French, for instance, only *il* can be used in contexts such as *il pleut* (**elle pleut*). The choice of *il* is determined by the unmarked status of *il* within the opposition *il/elle*: whereas *elle* is positively marked for femininity, *il* is a negative unit indicating the absence of the positive feature carried by *elle*. By virtue of its negative characterisation, *il* can be used in all contexts that are not limited to feminine reference. Like Ruipérez, Lampach assumes two *valeurs* for the unmarked term, an oppositive one and a neutral one (Lampach 1956: 64). As such, the neutral *il* is taken to represent the "archimorpheme" in the position of neutralisation. Equally, the French demonstrative *ce-* (as in *ceci, cela, ce qui, c'est*) is used in contexts where the inflected forms *celui, celle(s), ceux(-ci/-là)* cannot occur, i.e. in contexts where the number and gender oppositions are neutralised (Lampach 1956: 65).

The defining criterion for neutralisation is, in Lampach's view, its syntagmatic determination, i.e. the fact that neutralisation is triggered by factors that lie outside the members of the neutralisable opposition. On the basis of this criterion, the phenomenon of neutralisation is distinguished from other phenomena in grammar (Lampach 1957: 195-203), such as "indifference" (indifference or neutrality towards a relevant semantic feature within one unit – cf. neutrality in phonology – e.g. the indifference of the French subjunctive to the features 'present' and 'future'), "constant formal non-distinction" or syncretism (formal identity of distinct *signifiés*, e.g. the Spanish form *quería*, which is both first and third person) or "context-dependent formal non-distinction" (formal non-expression of syntagmatic contrasts, e.g. the use of the accusative for the subject in Latin infinitive propositions) (see also Schmidt 1989: 60-66).

1.3.2.5 *Garvin*

An early account of neutralisation in American structural linguistics is found in Garvin (1958: 32)¹¹. Garvin, writing in the anthropological tradition of Boas and Sapir, uses the notion "grammatical neutralisation" in connection with the grammatical category "obviation" in the Amerindian language Kutenai as a parallel to Trubetzkoy's "phonemic neutralisation" (Garvin 1958: 32)¹². Within this category, the obviative is said to be marked for marginality, i.e. it indicates the presence of a marginal, more remote referent, whereas the absolute is said to be unmarked or neutral as to marginality. In positions of neutralisation, the unmarked member (the absolute) serves to represent the entire category. Instances of neutralisation are observed in contexts where the grammar of Kutenai would normally require a unit to be in the obviative, but where, instead, the absolute occurs. In the case of "anticipated primary subjects" (Garvin 1958: 31), for example, the absolute is used to refer to entities that function in a preceding context as secondary, more remote subjects (and, accordingly, would be expected to be in the obviative), but in a later context as primary subjects. The use of the absolute signals an "impending change" in the role of the entity referred to (Garvin 1958: 31).

From the above discussion it follows that, by the middle of the 1950s, the term neutralisation outside the field of phonology was being understood differently by different linguists and that, consequently, a variety of phenomena were covered by this term. These differences are summarised in Table 1:

¹¹ An earlier version of this paper was published under the title "L'obviation en Kutenai – échantillon d'une catégorie grammaticale amerindienne", BSL 47.166-212 (1951).

¹² Interestingly, Garvin, in a footnote, refers to Ruipérez' conception of grammatical neutralisation, which he recognises as being somewhat different from his own.

Table 1: The notion of neutralisation in the 1950s

Neutralisation as the suspension of an opposition between <i>signifiants</i> = formal coalescence of different <i>signifiés</i>		
<i>Cantineau</i>	Paradigmatically determined ↔ Trubetzkoy/Jakobson: no “zero-opposition” = “constant phenomenon”, two <i>signifiés</i> are phonetically identical e.g. absence of number marking in French: <i>il(s) mange(nt)</i>	Syntagmatically determined ≈ Trubetzkoy e.g. <i>zâkar</i> ‘he has remembered’ and <i>zâkâr</i> ‘male’ before a pause in Hebrew ↔ Trubetzkoy: no functional opposition/no set of common features
<i>Prieto</i>	Only syntagmatically determined ≈ Trubetzkoy e.g. only [pətit] occurs in French before a word beginning with a vowel, to the exclusion of [pəti] ↔ Jakobson: no suspension of an opposition between <i>significations</i> (= <i>signifiés</i>)	
Neutralisation as the suspension of an opposition between <i>signifiés</i>		
<i>Hjelmslev</i> <i>Loss of semantic distinction through total fusion or implication</i>	Paradigmatically determined ↔ Trubetzkoy e.g. nominative and accusative fuse into one single unit (≈ Godel’s latent opposition) e.g. after prepositions in French <i>moi</i> occurs to the exclusion of <i>me</i> ↔ Trubetzkoy: no suspension of an opposition; <i>me</i> and <i>moi</i> are combinatory variants that are in complementary distribution	Syntagmatically determined ≈ Trubetzkoy e.g. after the preposition <i>längs</i> both dative and genitive are possible = contextual synonymy/free choice ↔ Trubetzkoy: both terms of the opposition can be used; no suppression of relevant features
<i>Ruipérez</i>	Only paradigmatically determined ↔ Trubetzkoy - Absence of units in certain paradigms e.g. one form for nominative and accusative in Latin neuter nouns ≈ Godel’s latent opposition; ≈ Hjelmslev’s syncretism/neutralisation	

	<p>- Impossibility of certain features to combine with others e.g. the incompatibility of the Greek aorist with the present tense ≈ Trubetzkoy's neutrality</p>
<i>Godel</i>	<p>Only syntagmatically determined ≈ Trubetzkoy Loss of semantic distinction because one of the terms takes over the function of the other term e.g. accusative form = subject in Latin infinitive propositions = contextual homonymy</p>
<i>Garvin/ Lampach</i>	<p>Only syntagmatically determined ≈ Trubetzkoy Loss of semantic distinction through the use of the unmarked term with its "neutral" <i>valeur</i> e.g. Lampach: impersonal <i>il</i>; however, no real neutralisation since <i>il</i> only has a syntactic function in impersonal constructions (viz. syntactic subject). Semantically, the neutral <i>il</i> is simply empty of meaning and does not semantically include masculine and feminine neutral <i>ce</i> in French ≈ Trubetzkoy's neutrality e.g. Garvin: the use of the absolute in the case of "anticipated primary subjects" in Kutenai. In this case, the absolute represents the category of obviation¹³</p>

1.3.3 Martinet's questionnaire of 1957

The topic of the possibility and legitimacy of extrapolating the notion of neutralisation to the domain of meaningful units was brought before a forum of linguists in 1957 by Martinet in the form of a questionnaire. The main purpose of this questionnaire was to delineate more precisely the concept of neutralisation in the domain of morphology and lexicon. In order to be able to draw useful comparisons among the different answers, Martinet confronts his fellow linguists with the following questions: (1) which part of the

¹³ Since I am not familiar with the Kutenai language and have no Kutenai grammar at my disposal, I consider this a valid illustration of neutralisation outside the field of phonology on the basis of Garvin's own explanation. However, a more detailed analysis is necessary in order to check whether the absolute actually represents the entire category of obviation in the so-called contexts of "anticipated primary subjects".

linguistic sign should be considered to undergo neutralisation, (2) what is the nature of the features that lose their relevance in the position of neutralisation, (3) which kind of units constitute neutralisable oppositions in the field of morphology and lexicon, and (4) what is the nature of the contexts in which neutralisations occur (Martinet, ed. 1957: 10-11). The answers of forty-five linguists to these questions were published in Martinet (ed.) (1957).

Since the various answers have already been summarised and critically reviewed by Corréard (Martinet, ed. 1957: 162-182) and by Schmidt (1989: 69-79), I will not go into any further discussion of them here. The value of the questionnaire does not so much lie in the fact that it results in a coherent and homogeneous theory of neutralisation in the domain of meaningful units, but rather in the fact that it identifies the problems associated with the use of the concept of neutralisation outside the domain of phonology. On the one hand, there is the strictly linguistic problem of a possible isomorphism between the different levels of language (can morphological and lexical units be structured in the same way as phonological units, are they equally analysable into features, etc.); on the other hand, there is the terminological problem of whether the use of the term neutralisation is legitimate in a field for which the term was not originally coined (since the use of the term with respect to meaningful units implies that the phenomena that it describes in this field are in some sense parallel to the phenomena from the field of phonology). As Schmidt (1989: 72) points out, the extension of the term is being further complicated by the heterogeneity of the units belonging to the semantic level of language, their virtually infinite number and their dual nature, i.e. their having both a *signifiant* and a *signifié*.

The diversity of the answers is not only connected to the positions the authors take as to Martinet's questions, but also to their interpretation of the phenomenon of neutralisation in phonology. Although Martinet's definition of phonological neutralisation at the beginning of the volume suggests – in accordance with Trubetzkoy's theory of neutralisation – a syntagmatic interpretation, some authors extend the notion of neutralisation to include a type of paradigmatic neutralisation as well (like Cantineau, Hjelmslev, and Ruipérez before them). Neutralisation, understood as a paradigmatically determined suspension of an opposition – either between *signifiants*, *signifiés* or *signes* – is a static phenomenon inherent to a particular language system (because of its static character, some authors call this type of neutralisation “passive” neutralisation [Kurylowicz] or “neutrality” [Smeaton]). What is neutralised in this case is an opposition between features within one single unit at the level of the language system (*langue*). Neutralisation in a Trubetzkoyan sense, on the other hand, is dynamic, in that it refers to the suspension of a functional opposition in certain positions in the *chaîne parlée*. Schmidt summarizes the difference as follows:

Während sich die paradigmatische Neutralisation durch die *non-pertinence* eines Unterschieds auszeichnet, besteht die syntagmatische Neutralisation in der *non-utilisation*. [...]. Dabei geht es nicht um das Aufgehobensein einer Opposition oder

das Fehlen von Merkmalen, sondern um die Aufhebung einer Opposition [...] in einem Syntagma. (Schmidt 1989: 71)

The questionnaire highlights the ways in which the notion of neutralisation is closely related with other notions, but should not be confused with them (e.g. syncretism – also called homonymy or homophony by some authors – restricted or defective distribution, overdifferentiation, incompatibility, latent opposition, neutrality, etc.).

1.4 The various senses of neutralisation from the 1960s onwards

In this part, I will focus on the different senses of neutralisation outside the field of phonology in modern linguistics from the 1960s onwards. As the notion was being transplanted from one metatheoretical paradigm to another, it lost its association with a particular theoretical approach to language, and consequently, the preconditions for neutralisation, as originally defined within structural-functional linguistics, took on different shapes. In particular, neutralisation came to be established as an umbrella term for any case where a contrast is cancelled out. In this section, I distinguish nine different senses and various sub-senses. It should be noted that the classification is based on how the authors *themselves* define or understand neutralisation. Occasionally, after an analysis of the examples, it will turn out that certain authors/senses could also be discussed in another (sub)section. Furthermore, as will become clear, some authors attribute multiple senses to the term neutralisation (even within a single publication).

1.4.1 Sense 1: suspension of a semantic opposition between two (or more) lexical units or grammatical categories in certain syntagmatic positions

1.4.1.1 In the position of neutralisation, one of the units stands for what is common to both or all of units of the opposition (neutralisation as semantic inclusion)

This conception of neutralisation was particularly elaborated in the writings of Coseriu, who takes up neutralisation as a basic principle of analytical structuralism (next to the principles of functionality, opposition and systematicity) and conceives of it as one of the most characteristic features of natural language (Coseriu 1992 [1981]: 225, cf. also

Ruipérez). According to Coseriu, the principle of neutralisation, as proposed by Trubetzkoy for phonology, pertains to all levels of language. He argues that many linguistic oppositions are “inclusive” (as opposed to traditional logical oppositions, which are “exclusive”), i.e. one of the terms of an opposition (the so-called “extensive”, “negative” or “unmarked” term) can, in certain environments, encompass the other term (the so-called “intensive”, “positive” or “marked” term). In the lexical opposition *Tag/Nacht*, for instance, *Nacht* is positively defined as “Tag + dunkel” (Coseriu 1978 [1973]: 27), whereas *Tag* is negatively defined in terms of the positive feature carried by *Nacht*. As a result of its negative characterisation, *Tag* can either function as the opposite of *Nacht* (‘not-A’) or as the neutral term including *Nacht* (‘not-A + A’), as in *Die Touristen blieben fünf Tage in Paris* (Willems, 2005: 380) and, hence, has a double *valeur* at the level of *langue* (cf. Ruipérez [§ 1.3.2] who also points to the bifunctionality of the unmarked term). Coseriu schematises a neutralisable opposition in the following way (Coseriu 1992 [1981]: 218):

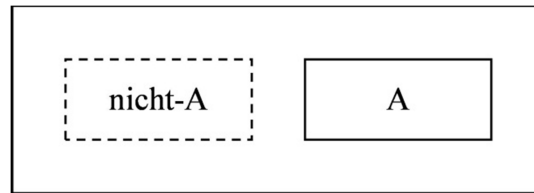


Figure 1: Neutralisation according to Coseriu

The principle of neutralisation constitutes an important restriction on the functionality of linguistic oppositions, because it implies that an opposition that exists at the level of the language system (i.e. in the *langue*) is rendered non-functional in certain contexts at the level of discourse (i.e. in the *parole*). Coseriu emphasises that neutralisations are language-specific and, from a synchronic point of view, unidirectional (the unmarked term of the opposition can entail the marked term but not the other way around). Furthermore, Coseriu draws a distinction between effective neutralisation in certain contexts at the level of *parole* (“Neutralisierung”) and the systematic possibility for neutralisation at the level of *langue* (“Neutralisierbarkeit”):

[...] die Neutralisierung als solche ist ein »Redefaktum«, die »Neutralisierbarkeit« jedoch ein sprachliches Faktum bzw. eine Möglichkeit der Sprache, die im Sprechen realisiert wird. Deshalb betrifft die Neutralisierung als Realisierung dieser Möglichkeit die Sprache selbst. (Coseriu 1992 [1981]: 220-221)

Coseriu (1978 [1964]: 109-110 and 1992 [1981]: 221-222) mentions the French opposition *dominer/maîtriser* as another instance of lexical neutralisation: *dominer* is the neutral term of the opposition and can be used instead of (“an Stelle von”) *maîtriser*, which bears the additional feature ‘+ intention’. As a consequence, *maîtriser* is particularly used with living beings (especially persons), whereas *dominer* does not have such restrictions. The opposition is said to be neutralised in a context such as *les ennemis*

dominant la ville (Coseriu 1978 [1964]: 110). In the field of grammar, Coseriu (1992 [1981]: 212-218) applies the term neutralisation to oppositions such as masculine/feminine (e.g. neutralised in the Spanish plural form *dos alumnos*, which can, depending on the context, refer either to two male students or to a male and a female student, whereas *dos alumnas* designates two female students); singular/plural (e.g. in the sentence *Der Deutsche ist so*); present/preterite (e.g. the “historical present” in sentences such as *Napoleon wird in Ajaccio geboren und stirbt auf St. Helena*); present/future (e.g. neutralisation in *voy mañana*). Other examples of semantic neutralisation are found in Coseriu (1975 [1952]: 59; 1978 [1964]: 90-163; 1978 [1966]: 193-238; 1978 [1968]: 254-273; 1974: 103-171; 2001 [1976a]: 15-33; 2001 [1976b]: 30-51; 2001 [1976c]: 7-25; 1976d; 1992 [1981]: 212-232; 1985: 25-35; 1987: 133-176).

Coseriu’s notion of neutralisation has been adopted by linguists working within the structural-functional framework (Heringer 1968: 217-231; Geckeler 1971a, 1971b, 1971c; Söll 1971: 493-505; Ducrot 1972: 147-154; Lyons 1977: 307; Klein 1981; Staib 1985: 145-158; Dietrich 1995: 141-149 and Timmermann 2007, among others). Some authors, however, disagree with Coseriu on some points and/or suggest some slight modifications to his theory. Klein, for instance, describes the concept of neutralisation (with respect to lexical units) the same way as Coseriu does:

Bei dieser [i.e. bei der Neutralisierung – MDB] wird der Gegensatz zwischen zwei Lexemen aufgehoben, so daß nur die beiden Oppositionsgliedern gemeinsamen Merkmale aktualisiert werden. Maßgeblich für diesen (dem Phänomen der Neutralisierung im phonologischen Bereich ähnlichen) Prozeß der Oppositionsaufhebung sind Kontext und Sprechsituation. (Klein 1981: 29-32)

However, in his empirical study of the French verbs *voir* and *regarder*, Klein uses the term neutralisation when, in certain contexts, the two verbs are exchangeable for one another without changing the meaning of the sentence (Klein 1981: 114-115). This is especially the case when both verbs are used in the imperative (*Regardez, la neige tombe!* and *Voyez, la neige tombe!* are said to be synonymous). It follows that, in Klein’s view, neutralisation can be encountered in contexts where the *parole*-meanings (or *contextual meanings*) of two lexical items are the same. This differs from Coseriu’s understanding of neutralisation, which is based on the realisation of the neutral *signifié* of only one term of an opposition. Accordingly, neutralisation is unidirectional for Coseriu, whereas to Klein both terms of the opposition can occur in the position of neutralisation. Neutralisation as interchangeability of two terms in certain contexts is also found in Dubois (1964: 5-16) and Nida (1975: 99-100). Nida gives the example of the lexical units *engine* and *motor* in English, which are interchangeable and identical in meaning in reference to the power plant of a car: one may say, for example, *start the motor/start the engine* or *repair the motor/repair the engine* (Nida 1975: 100). In the position of neutralisation, the distinctive features ‘small’ (normally a component of *motor*) and ‘large’ (normally a component of

engine) are said to be no longer determinative. Because in the examples given by Klein, Nida and Dubois, both terms of the opposition are interchangeable for one another, it is preferable to analyse them as cases of *contextually determined synonymy* (or simply *contextual synonymy*) as I have earlier suggested with respect to Hjelmlev's example of the use of either dative or genitive after the German preposition *längs*.

Timmermann (2007: 40-42) also works with Coseriu's notion of neutralisation, but argues that Coseriu's conception of a neutralisable opposition as an opposition between an intensive term with only one *signifié* and an extensive term with two *signifiés* (an oppositive and a neutral one) is too restricted. He suggests a distinction between two types of neutralisation: next to the traditional one (illustrated by Coseriu's example *Tag/Nacht* and called the "bioptional" type), he introduces a second type called the "trioptional" one (Timmermann 2007: 42). In "trioptional" neutralisable oppositions, one of the terms does not have a double, but a triple semantic interpretation. In the French opposition *rivière/torrent*, for instance, *rivière* can either be interpreted as the opposite of *torrent*, explicitly denying the feature 'reißend' inherent in *torrent* (as in *Rivière tranquille, lente...* – Timmermann 2007: 41), or as the neutral term including both the features 'reißend' and 'nicht-reißend' (as in *Les Normands entraînent par l'embouchure des rivières* – Timmermann 2007: 41), or as a synonym of *torrent* containing the feature 'reißend' (as in *Rivière vive, torrentielle* – Timmermann 2007: 42). This new type of neutralisation is schematised as follows:

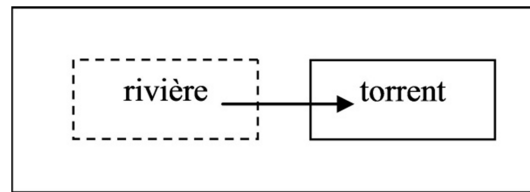


Figure 2: "trioptional" neutralisation according to Timmermann

However, Timmermann's claim that three different lexematic structures, i.e. three different *signifiés*, should be assigned to *rivière* is not convincing and is inconsistent if one takes Coseriu's distinction between the *langue*-meaning of a word and its *parole*-meaning in a specific referential context into account: the fact that *rivière* can be used for "torrential river", "calm river" or "river in general" is a matter of *parole* (determined by the verbal cotext and situational context) and should not be confused with the *langue*-meaning of *rivière*. At the level of *langue*, the lexical unit *rivière* can be analysed as being invariantly neutral as to the feature 'reißend' (or 'nicht-reißend' for that matter), i.e. in the analytical description, the feature 'reißend' should be assigned the value '0' rather than '– reißend' or '+ reißend'. The ability of *rivière* to combine both with lexical items expressing "tranquillity" and "rapidity" does not mean that *rivière* needs to be analysed differently in each particular instance, since this would be a projection of the meaning of the elements with which *rivière* is syntagmatically combined onto the meaning of *rivière* itself. Obviously, it is the inherent neutrality of *rivière* as to the feature 'reißend' at the

level of *langue* that accounts for the contextual variety at the level of *parole*. For this reason, I propose the term “lexical neutrality” instead of neutralisation (which corresponds to Trubetzkoy’s earlier discussed notion of neutrality and Lampach’s notion of indifference). In this connection, I also refer to Dupuy-Engelhardt’s distinction between neutralisation and neutrality that is discussed in § 1.4.2.

Staib’s theory of neutralisation (Staib 1985: 147-158) is, to a large extent, in accordance with Coseriu’s theory. Yet, contrary to Coseriu, for whom oppositions of the type *garçon/jeune-fille* are not neutralisable (Coseriu 1992 [1981]: 222-223), Staib considers this opposition to be neutralised in the lexeme *enfant*. This is similar to the sense in § 1.4.3.1, illustrated by Cruse (2000: 258). Since the lexical unit *enfant* is *always* semantically neutral or unspecified as to the opposition masculine/feminine (expressed by *garçon* and *jeune-fille* respectively), I suggest lexical neutrality rather than neutralisation for this phenomenon as well.

The notion of neutralisation as espoused by Coseriu is also found with linguists working outside the structural-functional paradigm. Andersen (1989: 31) associates neutralisation in grammar and lexis with the different “reference values” of antonymic pairs, where one of the terms can be used either contrastively or generically. In his view, “contextual neutralisation” in grammar and lexis means the “omission of semantic specifications for which there is no communicative need” (Andersen 1989: 32). In the context of neutralisation the unmarked term of the relevant grammatical or lexical opposition is selected, representing, in that instance, the entire opposition (e.g. when one talks of a *dog* having puppies – Andersen 1989: 32).

According to Lehrer (1985: 397-429), who also deals with neutralisation with regard to antonyms, neutralisation occurs in questions of the form *How X is it (he, she)?* or *Is it (he, she) X?* (stress on the adjective, not on the *how*). When, in such questions, the unmarked member of an opposition appears, it “carries no supposition as to which part of the scale is involved” (Lehrer 1985: 398).

Finally, Cruse (2000: 173) argues that the contrast between *lion* and *lioness* is neutralised in *We saw a group of lions in the distance*, where the meaning of *lion* is what is common to the two terms of the opposition (for a similar example, see Van Loon 1996: 19).

1.4.1.2 In the position of neutralisation, only one of the terms – the unmarked term – can occur to the exclusion of the other (i.e. is obligatorily used: neutralisation as distributional markedness)

This sense of neutralisation is based on the assumption that neutralisation in phonology is primarily characterised by the use of one of the members of an opposition in a certain

position and the defective distribution of the other in that position. Greenberg, for example, dealing with “contextual neutralisation” (see also Zwicky 1978: 139-141 or Haspelmath 2005: 39)¹⁴, says the following:

In certain environments the opposition between two or more categories is suppressed, and it is the unmarked member which appears. (Greenberg 2005 [1966]: 29)

He gives examples of number neutralisation in Hungarian and Turkish (where only the singular form of nouns may appear with cardinal numbers – Greenberg (2005 [1966]: 29), number neutralisation in classical Arabic verbal inflection (where in verb-initial clauses with a nominal masculine subject, only the masculine singular of the verb can occur regardless of the number of the subject – (Greenberg 2005 [1966]: 36-37), and gender neutralisation in German (where the neuter is used as representative of all genders in a context such as *Es ist ein Tisch* – (Greenberg 2005 [1966]: 40). A similar type of neutralisation is also found in Andersen (1972: 45, fn. 23). However, in contrast to Greenberg, who claims that in the position of neutralisation only the unmarked member can occur, Andersen, in dealing with “markedness reversals” (see also Battistella 1990: 57-61 and 1996: 36-40), argues that in certain marked “contexts of neutralisation,” the normally marked term of an opposition is used to the exclusion of the normally unmarked term. In English, for instance, the past/present opposition (*they knew* vs. *they know*) is neutralised in the marked subjunctive mood, and it is the normally marked past tense that must be used to the exclusion of the present (*I wish they knew*) (see also Shapiro 1983: 94). It should be noted that neither Greenberg nor Andersen raises the question of how the unit appearing in the position of neutralisation should be semantically described.

Some authors, on the other hand, also define neutralisation as the obligatory use of one of the terms of an opposition in certain environments, but at the same time, they also consider the semantic properties of the form appearing in the position of neutralisation. Schane (1970: 290-291), for instance, argues that although the form of the adjective looks on the surface like a masculine plural in a French sentence such as *Le garçon et la fille sont petits* (the masculine form is obligatory; **le garçon et la fille sont petites* is ungrammatical), it is not to be regarded as masculine in its function: semantically, the adjective does not reflect a masculine/feminine distinction, but only a plural one, which means that the opposition masculine/feminine has become neutralised in this environment. Schane points to the ambivalent behaviour of the masculine plural: as the unmarked member of the opposition, it can in some contexts be in contrast with the marked member,

¹⁴ Note that Andersen (1989: 35) also uses the term “contextual neutralisation”, but somewhat differently (cf. § 1.4.1.1)

whereas in other contexts, it is not in contrast, but instead represents the “neutralised state” (Schane 1970: 291).

Somewhat differently, Shaumyan (1986: 178-180) takes the view that in the position of neutralisation, the unmarked term can function either as the opposite of the marked term or can take over the function of the marked term. In accusative languages, for instance, subject means ‘agent’ and contrasts with object, which means ‘patient’. In the intransitive construction (the position of neutralisation), however, subject may mean either ‘agent’ or ‘patient’. In *John dances well*, for example, the subject denotes an agent, whereas in *Automobiles sell well*, the subject denotes a patient (Shaumyan 1986: 179).

Neutralisation as the *obligatory* use of only one member of a pair in certain positions (which *must* be used in combination with certain other linguistic elements to the exclusion of the other member of the opposition) is different from Coseriu’s conception, in which neutralisation is not so much a distributional phenomenon (concerning the differences in distribution between the terms of a neutralisable opposition), but rather a semantic one (concerning the semantic relation between the terms that constitute a neutralisable opposition). Accordingly, in Coseriu’s theory, the context of neutralisation is not defined as the position where only one of the terms can occur, but as the position where the neutral *signifié* of the unmarked term is realised. Importantly, for Coseriu, the marked member of the opposition is not excluded from occurring in the same environment as the unmarked member. One could, for example, also say *Die Touristen blieben fünf Nächte in Paris* (instead of *fünf Tage*), *Das Kind ist drei Jahre jung* (instead of *drei Jahre alt*) or *Die Deutschen sind so* (plural instead of singular), but then the opposition should not be considered to be neutralised: in the first case the focus would be on those parts of a twenty-four-hour period when there is no sunlight; in the second case the use of *jung* indicates that the child is young rather than old; and in the third case the plural form presents the Germans as a plurality of individuals (while the use of the singular form presents the Germans as a collective). Of course, when the speaker wants to abstract away the semantic difference between the two terms of the opposition, i.e. wants to refer only to what is common to the terms of the opposition, he needs to select the unmarked term (i.e. *Tag*, *alt* or singular). This is because the direction of neutralisation – which member can include the other term or terms of the opposition – depends on the language system (*langue*). On the other hand, whether the unmarked member is actually used with its neutral *signifié* in a particular context is, as Coseriu argues, to a large extent dependent on the intention of the speaker, who decides when a neutralisation takes place (e.g. he neutralises an opposition when he is not interested in the semantic difference and wants to realise a neutral, generic meaning – Coseriu 1976d: 54 and 1992 [1981]: 224), and from this point of view, neutralisations are optional. For the authors discussed in § 1.4.1.2, on the other hand, the speaker does not have a choice: he needs to select one of the terms of the opposition. A grammatical example is **Le garçon et la fille sont petites* (instead of *Le garçon et la fille sont petits*); an example from the lexicon is **Sus madres, María*

Herminia Descotte y Julio José Cortázar, eran argentinos (instead of *Sus padres, María Herminia Descotte y Julio José Cortázar, eran argentinos*). Therefore, in their view, neutralisations are obligatory.

For these reasons, I propose to distinguish between two subtypes of neutralisation: given its optional character, I suggest the use of the term “optional neutralisation” for Coseriu’s type of neutralisation. For the type of neutralisation where the choice for one of the terms of the opposition is obligatory and exclusively determined by the immediate linguistic context, I suggest the term “obligatory neutralisation”, but only when the unit that is used in the position of neutralisation refers to what is common to both members of the opposition, as is clearly the case in Schane’s example. As for Greenberg’s and Andersen’s examples, I suggest the following analyses: if in their examples the unit appearing in the neutralising position should be understood as realising a neutral *signifié*, I would also use the term “obligatory neutralisation”. Otherwise, when the unit in the position of neutralisation should be understood as not including the opposite term of the opposition, I would classify these examples as cases of “defective distribution”.

Table 2: optional and obligatory neutralisation

<p style="text-align: center;">Optional neutralisation</p> <p>Lexicon: <i>Die Touristen blieben fünf Tage in Paris</i> (vs. <i>Die Touristen blieben fünf Nächte in Paris</i>)</p> <p>Grammar: <i>Der Deutsche ist so</i> (vs. <i>Die Deutschen sind so</i>)</p>	<ul style="list-style-type: none"> - a semantic opposition between two (or more) lexical units or grammatical categories is suspended in certain syntagmatic positions - the use of one of the terms (usually the unmarked one) with its neutral <i>signifié</i> is optional, i.e. dependent on the speaker - the direction of neutralisation depends on the language system (<i>langue</i>) - the other member(s) of the opposition is/are not excluded from appearing in the same environment as the unmarked member
<p style="text-align: center;">Obligatory neutralisation</p> <p>Lexicon: <i>Sus padres, María Herminia Descotte y Julio José Cortázar, [...]</i> (vs. <i>*Sus madres, María Herminia Descotte y Julio José Cortázar, [...]</i>)</p> <p>Grammar: <i>Le garçon et la fille sont petits</i> (vs. <i>*Le garçon et la fille sont petites</i>)</p>	<ul style="list-style-type: none"> - a semantic opposition between two (or more) lexical units or grammatical categories is suspended in certain syntagmatic positions - the use of one of the terms (usually the unmarked one) with its neutral <i>signifié</i> is obligatory, i.e. one of the terms must be used in the position of neutralisation where it stands for what is common to both or all of the members of the opposition - the other member(s) of the opposition cannot occur in the position of neutralisation

Shaumyan's example is neither an illustration of optional nor of obligatory neutralisation, but rather of the phenomenon called "unaccusativity" in syntax. This term is applied to intransitive verbs whose syntactic subjects are not to be analysed semantically as agents (in transformational terms, the syntactic subject of an intransitive verb in the surface structure can be interpreted as the direct object of a transitive verb in deep structure, cf. Levin/Rappaport Hovav 1995). This is exactly what is at stake in Schaumyan's example: *Automobiles sell well*, where *automobiles* is the syntactic subject of the verb *to sell*, can be brought back to an underlying deep structure, viz., *X sells automobiles well*, where *automobiles* is the direct object of the verb. The use of the term neutralisation is not adequate, since the semantic description of the unit that appears in the so-called position of neutralisation (the syntactic subject) cannot be paraphrased as what is common to 'agent' and 'patient', i.e. the criterion of semantic inclusion is not fulfilled.

Gundel, Houlihan and Sanders (1986: 114-116) call Greenberg's type of neutralisation (as discussed in § 1.4.1.2) "neutralisation by dominance" or "classic neutralisation," which they define as a particular type of contextual distributional relation (next to free variation, contrast and defective distribution; for this reason, I mention their example in this section):

This type of distribution involves two forms A and B in contrast in one environment X while only one of the two forms occurs in another environment Y. The form that occurs in Y, moreover, can be ambiguously interpreted there as either A or B.
(Gundel et al. 1986: 114)

An example of "neutralisation by dominance" in syntax is provided by the distribution of genitive NPs in so-called picture noun phrases in English. Consider the following sentences:

- (a) A picture of John's is hanging on the wall
- (b) A picture of John is hanging on the wall
- (c) John's picture is hanging on the wall
- (d) *John picture is hanging on the wall

The phrase with the inflected NP in (a) can only be interpreted as a picture that belongs to John, the one with the non-inflected NP in (b) as a picture that was taken, painted,... of John. The (c)-sentence, however, is ambiguous, in that it can have either interpretation. In this context, the contrast between (a) and (b) is said to be neutralised. Sentence (d), with the non-inflected NP before the picture noun, is ungrammatical.

Examples of this kind will be discussed in more detail in § 1.4.8 (neutralisation as "syntactic ambiguity"). Since the (c)-sentence needs to be interpreted as *either* (a) *or* (b), or occasionally as both (a) and (b) – when it is a self-portrait of John (note that Gundel et al. do not take this possibility into consideration) – but can never signify that which is

common to the syntactic constructions (a) and (b), the use of the term neutralisation is inadequate.

1.4.1.3 In the position of neutralisation, a third term occurs that is different from the terms of the neutralisable opposition

For this type of neutralisation, Gundel et al. (1986: 116-118) coined the term “neutralisation by compromise”:

In this situation, two forms A and B contrast in one environment X, but neither occurs in another environment Y, where a third form C occurs instead that is interpreted as either A or B. (Gundel et al. 1986: 116)

An example of this kind of neutralisation involves the ellipsis of a verb and one of its arguments in English subordinate clauses, as illustrated below:

- (a) (John likes Mary more than) Martha likes Mary
- (b) (John likes Mary more than) John likes Martha
- (c) (John likes Mary more than) Martha

The clauses *Martha likes Mary* and *John likes Martha* are in contrast in (a) and (b). In (c), however, the contrast is neutralised in favour of a structure that is formally different from the two contrasting structures, but that can be interpreted as either one of them (Gundel et al. 1986: 118). Yet, this example too is more akin to the examples that will be discussed in § 1.4.9, and, hence, should be considered an illustration of the phenomenon of syntactic ambiguity rather than of neutralisation.

1.4.1.4 The unit that appears in the position of neutralisation is deprived of meaning (neutralisation as the elimination of meaning)

Neutralisation is understood in this way by Sangster (1982: 62-68). Conceiving neutralisation as such, he concludes that the notion of neutralisation is inappropriate at the semantic level of language. Phonemes are purely relative, oppositive, and negative entities with no meaning of their own. Morphemes, on the other hand, are not merely distinctive in character, but are endowed with meaning (Sangster 1982: 63). As a result, “a morpheme always signifies something, even when it occurs in isolation or a context where no opposition is possible [i.e. contexts of neutralisation –MDB]” (Sangster 1982: 63). Sangster argues that all too often cases where only one case form is allowed in a particular syntactic combination (e.g. after certain verbs or prepositions), are incorrectly described as instances of neutralisation (as, for instance, Martinet does – cf. discussion below). Following his line of argument, it cannot be assumed that in such instances the case that needs to be used has no meaning, since the meaning of a morpheme remains “intact” in all its contextual applications (Sangster 1982: 63). For this reason, Sangster argues that a

morphological opposition can never be completely neutralised. As Battistella (1996: 44) remarks, Sangster's motivation for denying semantic neutralisation is due to his specific treatment of neutralisation, viz., as the elimination of meaning rather than the suppression of opposite aspects of meaning.

Martinet's view on neutralisation (1968: 1-20) is, in fact, a combination of the previous senses discussed under § 1.4.1 above. He says,

[...] la neutralisation, [...], semble surtout se réaliser en retenant, dans un contexte déterminé, la forme d'un des membres de l'opposition à l'exclusion de l'autre et d'une forme différente de l'une et de l'autre.¹⁵ (Martinet 1968: 15)

Martinet mentions, for example, the use of the subjunctive mood in French after *il faut que* (to the exclusion of the indicative) as an example of neutralisation (*il faut que je fasse* – Martinet 1968: 13). At the same time, however, Martinet claims that although *fasse* formally looks like a subjunctive, it is not to be analysed as a subjunctive from a semantic point of view (Martinet 1968: 13 and 20): in those contexts where a subjunctive is not in opposition with an indicative, it loses its “fonction significative” (Martinet 1968: 9), in the sense that it is deprived of its modal *valeur*. In Martinet's view, neutralisation entails that the modality is no longer expressed by the subjunctive form, but, rather, is implied in *il faut*. Martinet's position is diametrically opposed to Sangster's, who holds that meaningful units are never completely “empty of meaning”.

In my view, there are two possible analyses of Martinet's example: either in terms of obligatory neutralisation or in terms of defective distribution (parallel to Andersen's and Greenberg's examples discussed above, in § 1.4.1.2). The former term is appropriate if the form *fasse* in *il faut que je fasse* is considered to stand for that which is common to the indicative and subjunctive mood in French (but not, as Martinet suggests, because the form *fasse* has lost its modal meaning in the position of neutralisation, which I believe is incorrect). The latter term is preferred if the subjunctive form *fasse* is considered to preserve its subjunctive meaning and needs to be used to the exclusion of the indicative form *fais* (i.e. defective distribution of the indicative after *il faut que*)

¹⁵ Martinet allows other types of neutralisation as well (e.g. both terms of the opposition can occur in the position of neutralisation; one of the terms occurs in context A, the other in context B), but these types of scenarios are less frequent in his view.

1.4.2 Sense 2: Neutralisation as the suppression of a specific semantic feature in certain syntagmatic positions

This use of the term neutralisation is found in Dupuy-Engelhardt (1990: 26-34 and 1995: 153-155). She treats neutralisation with respect to certain German lexical units of audible perception and their “semic reaction” (“réaction sémique” – Dupuy-Engelhardt 1990: 26) as to the relevant features of which they are composed. In her view, there are four “stable” relations (reactions) between a lexical unit and a semantic feature: two positive reactions (the lexical item contains a certain semantic feature [+] or the contrary of the indicated feature [-]), one negative reaction (the lexical item is incompatible with the indicated feature [*]), and one neutral reaction (the lexical item is indeterminate, neutral as to the indicated feature [0]). The phenomenon of neutralisation, then, involves the destabilisation of either of the two positive reactions. For example, in German, the verb *lachen* has the feature ‘+ Freude’ among one of its features, according to Dupuy-Engelhardt. In certain contexts, however, this feature can be neutralised or suppressed, e.g. in *Kahlmann lachte. Es klang wenig heiter* (Dupuy-Engelhardt 1990: 31). Apart from the question whether the feature ‘+ Freude’ is really a relevant feature of the verb *lachen* in German, it should be asked whether it is actually neutralised in the example given by Dupuy-Engelhardt (in assuming that it should be included in the analytic description of the verb *lachen*). This is arguably not the case. On the contrary, since the sentence *Es klang wenig heiter* explicitly denies the feature ‘+ Freude’, it cannot be considered to be cancelled in the preceding sentence, i.e. the presence of the feature ‘+ Freude’ in *Kahlmann lachte* is a precondition for its possible denial. Dupuy-Engelhardt mistakenly projects the denial of the feature ‘+ Freude’ in the second sentence onto the meaning of the verb *lachen* in the first sentence.

Like Coseriu, Dupuy-Engelhardt argues that neutralisation is a matter of discourse, the possibility of which is given at the level of *langue*. Unlike them, however, she distinguishes between neutralisation on the one hand and neutrality (“neutralité”) on the other (Dupuy-Engelhardt 1990: 29-31): whereas a “neutralisable lexical unit” contains a positive or negative semantic determination within the language system (e.g. ‘+ hörbar’: *schreien*, ‘– hörbar’: *schweigen* – Dupuy-Engelhardt 1990: 27) that can be neutralised in certain contexts, a “neutral lexical unit” is by definition unspecified or indifferent as to a specific semantic feature (e.g. ‘0 hörbar’: *atmen*, *er atmete hörbar/lautlos* – Dupuy-Engelhardt 1990: 27), and consequently, no specific semantic feature is available to be “neutralised” in certain positions. The difference between neutralisation and neutrality was already signalled by Trubetzkoy for the field of phonology (cf. § 1.2) and by Lampach (1957: 195-196) and Heringer for the field of semantics:

Neutralisationen sind distributiv bedingt. Sie treten nur in bestimmten Kontexten auf. [...]. Davon sollte man in der strukturellen Semantik unterscheiden eine andere

Erscheinung, die wohl auch als Neutralisation bezeichnet wird. „Neutralisation“ in diesem Sinne findet sich bei Pottier. (Heringer 1968: 227)

By way of illustration, Heringer discusses Pottier’s example of the implicational relation between the archilexeme *siège* and the lexical unit *chaise* in French (“hyperonyme” – “hyponyme”) and contrasts it with the opposition *Tag/Nacht* in German, which is neutralisable in contexts such as *man gab ihm eine Frist von 14 Tagen* (Heringer 1968: 226). Similar ideas are also expressed by Schifko:

Von einem anderen Blickwinkel betrachtet, stellt sich ein Archisemem /Hyperonym/ als semantischer Synkretismus dar (da in ihm alle Oppositionen zwischen seinen Hyponymen aufgehoben sind), der nicht mit der kombinatorisch bedingten Neutralisierung gleichzusetzen ist, wie im Fall von *groß – klein*, wo *groß* Semem und Archisemem (positiv markierte räumliche Quantität und Kategorie der räumlichen Quantität selbst) in sich vereinigt, im Sinne einer partizipativen Opposition.¹⁶ (Schifko 1975: 78-79)

Accordingly, Dupuy-Engelhardt considers Coseriu’s example *dominer/maîtriser* to be an instance of neutrality rather than of neutralisation: in her view, *dominer* is *always*, by virtue of its less specified semantic content, neutral as to the semantic feature ‘+ intention’ carried by *maîtriser* (i.e. it does not carry the mark), and this is the reason why *dominer* can substitute for *maîtriser* in all contexts. As for the opposition *homme/femme*, Dupuy-Engelhardt agrees with Coseriu in treating it as an example of neutralisation, because the feature ‘+ male’ is a functionally relevant feature of the lexical unit *homme*, which can be suspended in certain contexts. The different hierarchical relations are schematised as follows:

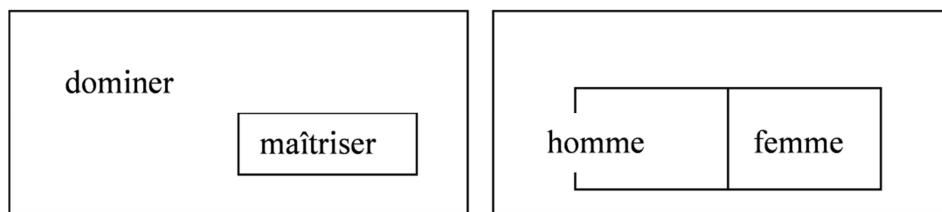


Figure 3: the difference between neutrality and neutralisation according to Dupuy-Engelhardt

However, Dupuy-Engelhardt’s notion of neutralisation is problematic, in that neutralisation essentially refers to the suspension of an opposition between at least two functional units (two lexical units, or, for that matter, two features). In contrast, in Dupuy-Engelhardt’s theory, it is understood as the elimination of a single semantic feature in

¹⁶ cf. Hjelmslev’s “law of participation” (1935: 102 and 1971 [1939]: 95). This concept was introduced by Lévy-Bruhl (1910).

certain contexts. As such, neutralisation does not affect the semantic relation between two units, but only the semantic structure of one single unit.

1.4.3 Sense 3: Neutralisation as the suppression of an opposition between semantic features

1.4.3.1 Within a third, independent lexical unit at the level of langue (neutralisation as inherent zero-specification or neutrality)

Cruse (2000: 258) also uses the term neutralisation in this sense. In English, for instance, the contrast between the features ‘male’ and ‘female’, or between ‘– female’ and ‘+ female’, on the basis of which the lexical items *stallion* and *mare* are distinguished, is allegedly neutralised in the lexical unit *horse*. Since *horse* is by definition always neutral as to the feature opposition ‘–female’/‘+ female’, Cruse proposes to include the feature ‘0 female’, i.e. a zero value, as one of the semantic components of *horse*, to indicate that the feature opposition is neutralised. At this point, *horse* differs from a lexical item such as *table*, for which the feature (opposition) is simply irrelevant and would not have to be specified at all in the semantic analysis (see also Cruse 2000: 258). Following Lampach, Heringer and Dupuy-Engelhardt, I suggest the term lexical neutrality to refer to examples such as Cruse’s, considering the inherent non-specificity of *horse*.

It should be noted that there are two types of lexical neutrality: in one type, the neutral *signifié* is represented by a third, independent unit (Cruse’s and Pottier’s example); in the other type, one of the terms of the oppositions is the neutral term (Timmermann’s and Dupuy-Engelhardt’s example).

1.4.3.2 Within a diachronically defined “archigrammeme”

Similarly, Leiss (1997: 137) talks about “Neutralisation von Merkmalsoppositionen”. However, as opposed to Lyons, whose focus is lexical and synchronic, Leiss deals with the neutralisation of grammatical feature oppositions from a historical perspective. In her view, neutralisation refers to a historical process whereby distinct grammatical features of different grammatical forms are reduced to a common set of features formally expressed by an “archigrammeme” (Leiss 1997: 137). Leiss tries to illustrate her point with the *s*-flexive in English. In present-day English, the *s*-flexive has a threefold function: it can serve as the marker of the adnominal genitive/possessive, the plural, or the third person singular indicative. Leiss argues that this formal identity is motivated by a semantic affinity between the genitive, plural and third person. On the basis of this reasoning, it is claimed that the opposition between the different grammatical features of genitive, plural and third person have, in the historical development of English, been neutralised. The result of this neutralisation is an “archigrammeme” [s] that is characterised by the features

‘[+Außenperspektive] [+Relation]’ (Leiss 1997: 145) that are common to the categories genitive, plural and third person. Leiss’ claim that the morphological identity of genitive, plural and third person in present-day English can be explained by assuming a common semantic core is highly controversial. Rather surprisingly, to my knowledge, there has not been any critical reception of this claim so far. One possible criticism is that Leiss’ attempt to reconstruct a semantic affinity between the three *s*-flexives in English is artificial, because, historically, they do not go back to the same form, i.e. they do not share a common etymon (cf. also Stein 1988: 235). Another problem is that the past tense does not take an –s in the third person (e.g. *he came*, *he played*), although it obviously needs to be characterised as ‘[+Außenperspektive] [+Relation]’ as well.

At any rate, Leiss’ use of the term neutralisation to refer to the historically determined reduction of semantic features is unlike the classic conception of neutralisation, which takes neutralisation to be a synchronic phenomenon (a paradigmatic functional opposition loses its relevance in a certain syntagmatic environment).

1.4.3.3 In certain syntagmatic positions

This sense basically corresponds to Coseriu’s conception of neutralisation, but the focus is different. Whereas Coseriu defines neutralisation as the suppression of an opposition between *entire units*, lexical items or grammatical categories, other authors, e.g. Battistella (1996: 60-61), understand neutralisation as the suppression of a *feature* contrast. In English, for example, *young* is the marked term of the opposition *young/old*, and can be analysed as “specification of lack of age”. *Old* is the unmarked term and can be analytically described as either “specification of age” or “non-specification of lack of age”. In a context such as *How old is that person?* the opposition between the “specifying options” (Battistella 1996: 61) is suppressed and “non-specification of lack of age” is the neutral realisation when the opposition is suspended. The view that neutralisation is to be situated at the level of semantic features might be influenced by Jakobson, who held that in phonology, neutralisation is characterised by the suspension of a (distinctive) feature (opposition) (cf. footnote 3). On the other hand, it might also be indicative of the terminological sloppiness in the discussion of neutralisation, particularly from the 1960s onwards: sometimes neutralisation is said to hold for *oppositions between* two (or more) items (either between entire units or between features), at other times, the term is used with respect to *individual* lexical items, grammatical categories or features. Strictly speaking, neutralisation only applies to oppositions between entire units.

1.4.4 Sense 4: Neutralisation as syncretism

In Greenberg’s 1966 monograph, neutralisation is often equated with syncretism, a confusion that might be due to Hjelmslev (but, as already noted above, Hjelmslev’s under-

standing of the notion of syncretism, in his 1939 article on neutralisation, deviates from the classic conception). Greenberg, for example, says as follows:

Where a neuter exists alongside of a masculine and feminine, the neuter is the most marked category and can be opposed to the masculine/feminine.¹⁷ A well-known example is the *neutralisation* in Indo-European of the nominative accusative distinction in the neuter noun. In Dravidian languages the neuter *syncretizes* the singular and the plural. (My italics – MDB) (Greenberg 2005 [1966]: 39-40)

Trnka (1982 [1958]: 149-156 and 1982 [1974]: 356-360) draws a distinction between what he calls the “paradigmatic type of neutralisation” and homonymy:

While the latter consists in the identity of some of the phonological exponents of the morphological opposition, neutralisation is the suppression, under specified non-phonological conditions, of the morphological opposition itself. (Trnka 1982 [1974]: 358)

In Trnka’s view, neutralisation can be illustrated by the formal identity of nominative and accusative in the neuter nouns in the Indo-European languages or by the identity of second and third person in spoken French (e.g. *tu es – il est*). On the other hand, the formal identity of the dative and genitive singular in Latin feminine nouns is taken to be an example of homonymy (in Trnka’s view, because the morphological opposition of genitive singular and dative singular is implemented, with other substantives, by non-homonymous expedients). It is hard to see why the formal collapse of the nominative and accusative in the neuter is treated as an example of neutralisation rather than an example of homonymy or syncretism. After all, the two functions remain distinct in all contexts despite their identical phonological realisation. The same holds for the French example, for which the notion of homophony might be better suited. Neutralisation is also understood as syncretism in Plank (1987: 177-238), who discusses “number neutralisation” in Old English (e.g. in the West-Saxon dialect, the genitive singular is formally identical to the genitive plural in the strong declension of masculine and feminine *u*-nouns: *sun*a ‘son[s], *dur*a ‘door[s]’ – Plank 1987: 187)

The equation of neutralisation with syncretism (or the idea that syncretism is a special case of neutralisation) is particularly common in the generative Head-Driven Phrase Structure Grammar (HPSG). Ingria (1990: 197) uses the term “morphological neutralisation” when “an element does not morphologically distinguish between two or more

¹⁷ Note that whereas the criterion of syncretisation (also called neutralisation by Greenberg) points to the *marked* status of the neuter in a three gender system (because it neutralises/syncretises certain oppositions that do exist in the unmarked category – Greenberg 2005 [1966]: 27), the criterion of contextual neutralisation (as discussed in § 1.4.1.2, and also called neutralisation by Greenberg) points to the *unmarked* status of the neuter.

values of a feature”. In French, for example, the pronoun *nous* is said to be marked for more than one case (viz., either accusative or dative). As a result, the conjunction of verb forms assigning those different cases is allowed with *nous* (*Paul nous a frappé et donné des coups de pied* as opposed to **Paul l’a frappé et donné des coups de pied* – Ingria 1990: 198). Likewise, the first and third person plural forms of German verbs are said to neutralise the person marking on the verb, which is clear from the possibility of elision in conjoined subordinated clauses (...*weil wir das Haus und die Muellers den Garten kaufen* as opposed to *...*weil ich Bier und du Milch trinkst/trinke* – Ingria 1990: 198). Bayer (1996: 587-588) discusses the same examples as Ingria, but calls them “argument neutralisation” and “verb neutralisation” respectively. Levy and Pollard (2002: 222) also use the term “argument neutralisation” referring to sentences such as *Er findet und hilft Frauen* (**Manner/*Kinder*).¹⁸ Clearly, the examples mentioned above are also to be considered cases of syncretism rather than neutralisation, for the obvious reason that the semantic difference between, for instance, *nous* (accusative) and *nous* (dative) is still maintained.

Within HPSG, neutralisation is also known as underspecification or indeterminacy. Ingria (1990: 199), for instance, argues that the item in which an opposition is neutralised is underspecified or indeterminate with regard to two or more values of a concord feature. As such, neutralisation is distinct from ambiguity, which is “full specification” (Ingria 1990: 199 – see also Zaenen and Karttunen 1984: 309-320; Pullum and Zwicky 1986: 751-773; Bayer and Johnson 1995: 70-76; Dalrymple and Kaplan 2000: 759-798; Daniels 2001; Levy 2001 and Levy and Pollard 2002: 221-234). Ambiguity is said to occur in sentences such as **The sheep that is ready are here*. According to Ingria, *sheep* can denote an individual or a set of individuals, which suggests that *sheep* is not underspecified, or vague, but rather ambiguous.

[...] there is not a single representation for “sheep”, which is underspecified for number, but rather two distinct entries, fully specified for number in both its syntactic and semantic aspects. (Ingria 1990: 199)

It is clear that here again, one is dealing with syncretism. The verbal forms *is* and *are* prove that *sheep* is a form that can have two different functions, even though these differences are not formally expressed in the noun.

¹⁸ Furthermore, Levy and Pollard (2002: 222) distinguish “argument neutralisation” from “functor neutralisation,” which is illustrated in *Kim is a Republican and proud of it*. Rather than analyzing this sentence as a case of neutralisation, Willems (2005: 393) suggests that one should simply analyze it as a stylistic – zeugmatic – effect.

1.4.5 Sense 5: Neutralisation as the paradigmatically determined suspension of an opposition between two (or more) grammatical categories

1.4.5.1 Neutralisation as neutrality in categories

In Miestamo (2005: 54) neutralisation is defined as the lack of a one-to-one-correspondence between two paradigms through the loss of distinctions in one of the paradigms (Miestamo suggests using the term “paradigmatic neutralisation” for this phenomenon). In the Australian language Maung, for example, the affirmative paradigm makes a distinction between realis and irrealis, but in the negative paradigm, only irrealis marking is possible, and the realis-irrealis distinction is lost (Miestamo 2005: 9). Another example is the neutralisation of the distinction between the habitual and the progressive aspect in the Amerindian language Páez: there is a habitual aspect in Páez, but it cannot be used in negative clauses, the progressive being used instead. As the habitual cannot occur in the negative, the distinction between progressive and habitual is neutralised in the negative paradigm (Miestamo 2005: 11). In other words, in this sense, neutralisation involves the exclusion of a grammatical category in a certain paradigm and results in only one grammatical category being formally expressed in that paradigm.

This sense of neutralisation is similar to what Schmidt calls “Neutralität in Kategorien”:

Neutralität in Kategorien äußert sich darin, daß in einem grammatischen Subsystem nur eine Serie von Einheiten vorhanden ist, die deshalb nicht eine für andere Subsysteme relevante Opposition ausdrücken können. (Schmidt 1989: 158)

Another example of this phenomenon is the aspectual opposition between *imparfait* and *non imparfait*, which have no separate expression for the present and future tense in the French language system, e.g. *Mon père travaille; je n’entre pas* as opposed to *Mon père travaillait; je ne suis pas entré* (Martinet 1968: 18, cf. Schmidt 1989: 159). Of course, the fact that the distinction between *imparfait* and *non imparfait* in French is not expressed formally in the present and future tense does not mean that this opposition cannot be intended by the speaker in a certain referential context, that is, although the present or future tense do not *express* (i.e. at the level of *langue*) whether the action described by the verb is either imperfective or perfective, a speaker can still *mean* (i.e. at the level of *parole*) either of these functions (*Mon père travaille*, for instance, can have an imperfective meaning – *Mon père travaille à ce moment* – or it can have a perfective meaning, e.g. when reference is made to a past or usual and frequently repeated action – *Mon père travaille dans une grande entreprise*).

This also holds for Miestamo’s examples, since the grammatical form that is the only possible option in the negative paradigm (e.g. the form of irrealis or the progressive form)

can still be *used* for two (contrasting) functions (e.g. *either* realis *or* irrealis, *either* progressive *or* habitual): although there is only one form left at the level of *langue*, the relevant opposition can still be expressed at the level of *parole*. Another nice illustration of this is provided by the Uralic language Komi-Zyrian, where the affirmative paradigm makes a distinction between the present (a) and the future (b), but the future is incompatible with negation and the present/future distinction is lost in the negative (Miestamo 2005: 11). However, (c) is the negation of *both*:

Komi-Zyrian (Rédei 1978: 105-108, cited from Miestamo 2005: 11-12)

- | | |
|------------------|--------------------|
| (a) <i>śet-e</i> | (b) <i>śet-a-s</i> |
| give-3SG.PRES | give-FUT-3SG |
| ‘(S)he gives.’ | ‘(S)he will give.’ |
-
- | |
|-----------------------------|
| (c) <i>o-z śet</i> |
| NEG-3 give |
| ‘(S)he does/will not give.’ |

Thus, when in Komi-Zyrian, a speaker wants to put a present or a future sentence in the negative, he needs to make use of a form that is, at the level of the language system, neutral as to the present/future distinction. Consequently, whether the (c)-sentence is a negation of (a) or (b) is a matter of *parole* (depending on the intention of the speaker and the broader extralinguistic context) and not a matter of *langue*.

The term neutralisation seems inadequate to refer to the asymmetrical relation between the affirmative and negative paradigms, more precisely, the absence of grammatical forms in the negative paradigm (as Miestamo does), particularly because the loss of distinctions is already paradigmatically determined at the level of *langue*. Talking about neutralisation implies that, e.g. the present/future opposition is also relevant for and formally expressed in the negative paradigm, but that occasionally (in combination with certain linguistic elements on the syntagmatic axis or dependent on the intention of the speaker) this opposition can be suspended (with the term that is used in that instance standing for what is common to the terms of the opposition). This is, however, not the case. Therefore, following a terminological distinction introduced by Schmidt (1989), I would use the term “neutrality in categories”.

Verstraete’s example of neutralisation (Verstraete, 2005: 611-626) is very similar to the examples given by Miestamo. According to Verstraete, the distinction between English coordinate and subordinate constructions in terms of illocutionary force (coordinate constructions are characterised by the presence of illocutionary force in both clauses, whereas subordinate constructions are characterised by the absence of illocutionary force in the subordinated clause) is formally reflected in divergent behaviour of the basic syntactic markers of illocutionary force, viz., the different basic clause types (declarative, interrogative and imperative): the coordinate construction is compatible with the three

different clause types; the subordinate construction, on the other hand, does not allow any clause type beyond the declarative, as Verstraete (2005: 614) illustrates with the following examples:

- (1a) John was imprisoned, but he didn't rob the bank.
- (1b) John was imprisoned, but did he really rob the bank?
- (1c) John was imprisoned, but don't forget that he robbed the bank!
- (2a) John was imprisoned after he robbed the bank.
- (2b) * John was imprisoned after didn't he rob the bank?
- (2c) * John was imprisoned after do keep in mind that he robbed the bank!

Verstraete argues that because of the absence of a paradigmatic contrast with other basic clause types within the subordinate construction, the declarative in (2a) can be analysed as being functionally different from the declarative in (1a). The declarative in (1a) functions as a marker of assertive illocutionary force (Verstraete 2005: 614), but the declarative in (2a) cannot equally be regarded as marking assertive force. Instead, Verstraete suggests that the declarative in subordinate clauses should be analysed as

[...] a typical instance of a switch to the unmarked option of a paradigm in contexts of neutralisation [...] (comparable to the switch to the unmarked member of the paradigm in contexts of phonological neutralisation, as discussed by Trubetzkoy 1939: 77-79, 81). (Verstraete 2005: 614)

However, an analysis in terms of neutralisation is inadequate given that the term that appears in the so-called "context of neutralisation" (viz., the declarative) does not (semantically) encompass the other terms of the opposition: the declarative in (2a) does not stand for that which is semantically common to the declarative, the interrogative and the imperative. Yet, analyzing Verstraete's example as an instance of neutrality in categories is also inappropriate, since the declarative in (2a) cannot be used with an interrogative or imperative meaning. Therefore, I consider Verstraete's example to be simply a case of defective distribution: the interrogative and the imperative can be used in the coordinate construction, but not in the subordinate construction.¹⁹

What Verstraete describes as neutralisation has also been treated by Ross (1973: 397-422) under a more general principle called the "Penthouse Principle," which Ross applies to the order of constituents. According to this principle, syntactic operations that are

¹⁹ Note that the criterion of subordination is, in fact, not sufficient to prevent an interrogative or an imperative from being used in a subordinate clause. In the following examples, the use of the interrogative and the imperative in subordinate clauses is perfectly normal: *John was imprisoned after the policeman asked whether he robbed the bank*; *John was imprisoned because didn't he rob the bank?* or *John was imprisoned after the judge said: "Do not forget that he robbed the bank!"*. This issue, however, will not be discussed any further here.

possible in subordinate clauses are also possible in main clauses, but not always vice versa.

1.4.5.2 Neutralisation as morpho-syntactic asymmetry

Comrie (1976: 116) understands neutralisation as the loss of formal distinctions in one class of verbs that are manifest in another class of verbs. He points to the fact that while most Georgian verbs have distinct aorist and imperfect forms, some stative verbs lack this distinction. Such verbs only have one form, which is morphologically an aorist, but semantically like that of the imperfective of other verbs (e.g. *vižeki* ‘I was sitting’, *vizine* ‘I slept, was asleep’ – Comrie 1976: 116).

This sense of neutralisation corresponds to Schmidt’s “morpho-syntaktische Asymmetrie,” which she describes as

[...] die Abwesenheit von Flexionsformen bei einzelnen Adjektiven, Substantiven und Verben, die zur Folge hat, daß bestimmte syntaktische Bezüge nicht hergestellt werden können, obwohl dies mit analogen Formen derselben Klasse möglich ist.
(Schmidt 1989: 146)

This also holds for Comrie’s example, where the aorist/imperfect opposition is essential for the structure of the Georgian verbal system, but where this opposition is not expressed in the conjugation of some stative verbs. Morphosyntactic asymmetry in this case refers to the defectiveness of some stative verbs, which are semantically incompatible with the non-durative aspect.

The difference between morphosyntactic asymmetry and neutrality in categories is that while the former refers to cases where one form in certain lexical classes (adjectives, nouns, verbs) cannot be used for two or more contrasting functions at the level of *parole*, the latter applies to asymmetries between entire paradigms or categories where one form is neutral between two or more different functions at the level of *langue*, but can still express the functional difference at the level of *parole*.

1.4.6 Sense 6: neutralisation as the suspension of a grammatical category in certain syntagmatic positions

In this sense, neutralisation refers to the fact that in certain syntagmatic contexts a grammatical category is not expressed formally. Neutralisation is defined in this way by Rappaport (1980: 295), who discusses neutralisation with respect to Russian adverbial participle clauses. In these types of clauses, two kinds of neutralisation are said to occur: on the one hand, in adverbial participle clauses the grammatical subject has no formal expression of its own, as in the following example, where *ožidaja* is the adverbial participle (Rappaport 1980: 278): *Ona poslala čeloveka I devušku iskat’ ego I, ožidaja,*

sidela ‘She sent a man and a girl to look for him, and, (while) waiting, sat.’ This is considered a case of “syntactic neutralisation”. On the other hand, the perfective adverbial participle in Russian does not express tense, that is, it may describe an event that is anterior, simultaneous, or posterior to the primary event described in the main clause. This is allegedly a case of “morphological neutralisation,” which is illustrated with the following examples (Rappaport 1980: 289):

(a) anterior: *Vojdja v kabinet, Rjabinin osmotrelsja* ‘Having entered the office, Rjabinin looked around.’

(b) simultaneous: *Vstretja vas, ja (pri ètom) ne poveril svojim glazam* ‘(When) meeting you, I did not believe my eyes.’

(c) posterior: *On brosil papirosku na zemlju, rastoptav ee dvumja sliškom sil ‘nymi udarami nogi* ‘He threw the cigarette on the ground, stamping it out with two excessively strong taps of (his) foot.’

As Rappaport (1980: 296) points out, the meaning corresponding to the neutralised category (i.e. subject or tense) may be assigned by reference to the immediate grammatical context. This means that the subject or temporality of the main clause may be imposed on the adverbial participle clause. Alternatively, the adverbial participle clause may also be interpreted in a way that is consistent with the extralinguistic context and pragmatic knowledge of the speaker/hearer.

Here also, alternative analyses are necessary. Rappaport’s “syntactic neutralisation” concerns the *elimination* of a grammatical category (in this case, the subject) in certain syntagmatic contexts. Since what is at stake here is the omission of the grammatical subject (the interpretation of which can be inferred from the linguistic context and/or situational context), I would classify this example as an instance of ellipsis.²⁰ In respect of Rappaport’s “morphological neutralisation”, I propose an analysis in terms of neutrality in categories rather than neutralisation: since the Russian perfective adverbial participle does not *say* anything, at the level of *langue*, about the temporality of the action described, but is characterised by dependent or relational tense meaning (i.e. is to be interpreted in relation to the process or event expressed by the verbal predicate of the main clause), the perfective adverbial participle should be analysed as a neutral form that can, however, be used by a Russian speaker to express anteriority, simultaneity or posteriority.

²⁰ For a thorough discussion of the phenomenon of ellipsis, I refer to Klein (1993: 763-799).

1.4.7 Sense 7: Neutralisation as the suspension of an opposition between two units in the sense that in some contexts these units have identical reference (neutralisation as referential identity)

According to Lehmann (2000: 249-253) the contrast between *Mann* and *Stück* in German is occasionally neutralised in favour of *Stück*. In the sentence *Gib mir mal drei Stück!* (Lehmann 2000: 250), *Stück* designates non-human objects (typically compact, solid objects such as fruit or ball-point pens). On the other hand, *Mann* refers to human beings in *Gib mir mal drei Mann!* (Lehmann 2000: 250), which could be used in contexts where persons are counted (e.g. in military or sports contexts). In the exchange *Wieviele Matrosen brauchst du? – Gib mir mal drei Mann!*, however, *Mann*, which makes anaphoric reference to *Matrosen*, may be replaced by *Stück*, and then the contrast is allegedly neutralised.

This use of the term neutralisation is problematic mainly for two reasons: first, *Mann* and *Stück* do not constitute a functional opposition in the German language system, i.e. they are not directly opposed, because they belong to different semantic fields, and, consequently, are not neutralisable *stricto sensu*. Second, the lexical unit *Stück* does not stand for that which is common to *Mann* and *Stück* when it is used instead of *Mann*, but is merely identical in reference to *Mann* (equally refers to human beings on that occasion). Therefore, Lehmann's example is a matter of designation. This is unlike neutralisation, which is, strictly speaking, a matter of signification. For these reasons, I would prefer to use the term "referential identity" rather than neutralisation.

1.4.8 Sense 8: Neutralisation as the suspension of an opposition between two (or more) deep structures in one and the same surface structure (neutralisation as syntactic ambiguity)

This notion of neutralisation is found in Lyons (1968: 253-255), where it is opposed to "diversification" (two sentences which differ in surface structure, but are identical in their deep structure). In the Latin infinitive construction *Dico Clodiam amare Catullum*, the opposition between (a) *Clodia amat Catullum* 'Clodia loves Catullus' and (b) *Clodiam amat Catullus* 'Catullus loves Clodia' is considered to be neutralised, since either (a) or (b) can be embedded as the object of *dico*. The same conception of neutralisation was adopted by Haiman (1980: 517).

The synonymous use of the terms neutralisation and syntactic ambiguity/homonymy is inconsistent since neutralisation by definition involves the non-functionality in certain contexts of an otherwise functionally relevant (paradigmatic) semantic opposition; syntactic ambiguity, on the other hand, is simply about the accidental semantic vagueness of certain sentences due to the absence of grammatical markers to express different syntactic

relations (see also Schmidt 1989: 114). It is exactly the possible polyfunctionality (from the point of view of the speaker) or polyinterpretability (from the point of view of the hearer) of one and the same surface structure which makes out the ambiguity of a sentence and indicates that – for the speaker or the hearer – a semantic opposition is not neutralised in such a case: a speaker always has one of the possible syntactic meanings (in the sense of Coseriu’s “syntaktische Bedeutung” – Coseriu 1987 [1971]: 90) in mind (and never both or all of them at the same time); equally, a hearer, when confronted with an ambiguous sentence, always has the possibility to choose from either of the two (or more) possible interpretations. Therefore, as Schmidt also notes, it is inaccurate to talk about “disambiguation” when dealing with neutralisation:

[...] wo aus ökonomischen Gründen eine (aus der Sicht des Sprechers) für die Kommunikation funktional unerhebliche Information nicht gegeben wird, gibt es auch nichts zu desambiguieren, weil das, was für die Absicht des Sprechers wesentlich ist, gesagt wird. (Schmidt 1989: 115)

For this reason, it is advisable to preserve the term syntactic ambiguity for the examples discussed by Lyons, Haiman and Gundel et al., in order to keep them strictly separate from the phenomenon of neutralisation.

1.4.9 Sense 9: Neutralisation as the suppression of “conformity judgements”

This somewhat peculiar type of neutralisation is found in Coseriu’s 1985 article on linguistic competence. It needs to be understood against the background of the distinctions Coseriu makes between, on the one hand, different *levels* of language, on the one hand, and different *points of view*, on the other, from which these levels can be investigated. As for the levels of language, Coseriu distinguishes between (1) language in general (the universal level), (2) particular languages (the historical level), and (3) language as individual discourse (the individual level). At each of these levels, language may be regarded as (a) activity (ενέργεια), (b) the knowledge underlying this activity (δύναμις), and (c) as product (έργον). The combination of these distinctions yields a matrix with nine different cells (Coseriu 1985: 29; 1992 [1981]: 254 or 2007 [1988]: 75):

Table 3: The three levels of language and the three points of view from which these levels can be investigated in Coseriu's theory of language

<i>Levels</i>	<i>Points of view</i>		
	Activity ενέργεια	Knowledge δύναμις	Product Έργον
Universal	Speaking in general	Elocutional knowledge	Totality of utterances
Historical	Concrete particular language	Idiomatic knowledge	(Abstracted particular language) ²¹
Individual	Discourse	Expressive knowledge	Text

Coseriu argues that at each level of language there are judgements about the acceptability of an utterance. Depending on whether a linguistic expression must be regarded as a suitable (or non-suitable) realisation of elocutional, idiomatic or expressive knowledge in speech, it must be submitted to different kinds of judgements, namely to judgements of “congruence”, “correctness” or “appropriateness,” respectively. Accordingly, Coseriu (1985: 34) distinguishes, for the three levels of language and the three types of expressed and communicated content, three types of “conformity judgements”:

Table 4: the various types of “conformity judgements”

<i>Levels</i>	<i>Content</i>	<i>Judgements</i>
Speaking in general	Designation	congruent/incongruent
Concrete particular language	Meaning	correct/incorrect
Discourse	Sense	appropriate/inappropriate

However, what appears to be unacceptable at one level of language may be, in Coseriu's view, neutralised by the “conformity judgements” at another level of language. Coseriu illustrates his point with the following examples: a sentence such as *I saw it with my own*

²¹ Coseriu (1985: 28) observes that a particular language never appears as a product (έργον) in the real world: “What is produced within a particular language as such either remains a unique “text fragment” (*hapax*) or is taken over as part of the linguistic knowledge of a community to be continued as a new tradition” (Coseriu 1985: 28). For this reason, Coseriu argues that only “abstracted language” can be product (έργον), i.e. language that is derived from activity or from knowledge and can be recorded as product in a grammar and in a dictionary.

eyes may be incongruent from the elocutional point of view (since it is obvious that we can only see with our own eyes), but, as Coseriu says, “the incongruence is neutralised by the corresponding traditions of the particular languages” (Coseriu 1985: 35). Likewise, sentences such as *The five continents are four* or *Colourless green ideas sleep furiously* are incongruent from the elocutional point of view, but may nevertheless be appropriate (the first as a joke, the second in a poem). As for the neutralisation of incorrect utterances by appropriate ones, Coseriu mentions “foreigner talk”: in certain situations, a native speaker of a language speaks his own language incorrectly when communicating with foreigners, “in the conviction that the latter can only understand simplified and incorrect utterances” (Coseriu 1985: 35). A German sentence such as *Du kommen mein Haus, dort zusammen trinken* (in the context of a German speaker talking to an immigrant – Coseriu 1985: 35) will not be qualified as incorrect, since what is incorrect in this case is considered necessary and appropriate and, hence, judgements of incorrectness are neutralised.

For Coseriu, also this type of neutralisation goes in one direction only: “linguistic correctness neutralizes the incongruence and the appropriateness may neutralize both incongruence and incorrectness” (Coseriu 1985: 35). Furthermore, the suspension of conformity judgements is dependent on the intention of the speaker, which is an additional parallel to lexical and grammatical (optional) neutralisation: it only takes place when the violation of norms of correctness and norms of congruence is intended by the speaker (and is being recognised as such by the hearer). For example, if somebody does not know how to speak correctly or congruently, then his utterance is simply incorrect or incongruent. On the other hand, if somebody intentionally speaks incorrectly or incongruently (and the hearer is aware of the intention of the speaker), then the incorrectness or incongruence may still be there, but they are tolerated and qualified as necessary and, from this point of view, judgements of incorrectness or incongruence may be neutralised. On the basis of these similarities, Coseriu concludes that neutralisation is a pervasive characteristic of language that can be encountered not only in grammar and lexicon, but at the discourse level (pragmatics) as well.

However, Coseriu’s adherence to the principle of neutralisation as the working mechanism behind this type of phenomenon as well is partly system-biased, i.e. due to the typically structuralist tendency to conceive of a language as a systematically structured whole with strict analogies between the different levels of language. Furthermore, the parallel between lexical and grammatical neutralisation, on the one hand, and the suspension of conformity judgements on the other, is less clear when it comes to the criterion of inclusion, since one cannot simply argue that judgements of appropriateness can be interpreted as standing for that which is common to judgements of incongruence, incorrectness and appropriateness.

What Coseriu describes as neutralisation at the level of discourse might be alternatively analysed with reference to the conversational maxims introduced by Grice (1975: 41-58 or

1978: 113-127). The sentence *I saw it with my own eyes*, for example, might be interpreted as a purposeful violation of the maxim of Quantity, since the speaker makes his contribution more informative than is strictly required. In *The five continents are four*, *Colourless green ideas sleep furiously* and *Du kommen mein Haus, dort zusammen trinken*, the maxim of Manner is being violated (“be perspicuous, avoid obscurity of expression”), but again, the maxim is being flouted purposefully, rendering its violation communicatively effective.

1.5 Conclusions

This historiographical overview has shown that the term neutralisation has been applied to a variety of diverging linguistic phenomena in the field of meaningful units. In order to prevent neutralisation from becoming a vacuous concept in linguistics, I argue that its use should be restricted to a particular type of linguistic phenomenon and that its application to other phenomena should be replaced by other (either already existing or new) terminologies. Therefore, I believe that the use of the term neutralisation outside the field of phonology should be limited to the *optional or obligatory suspension of a semantic opposition between two (or more) lexical units or grammatical categories in certain syntagmatic contexts, whereby in the position of neutralisation, one of the units stands for what is common to all of the units of the opposition*. Optional neutralisation is primarily illustrated by Coseriu and other linguists working within the structural-functional paradigm, but also by Lehrer (1985), Andersen (1989), Van Loon (1996) and Cruse (2000: 173). Obligatory neutralisation can be encountered in the writings of Schane (1970) and Garvin (1958); and in Martinet (1968), Greenberg (2005 [1966]: 29), Andersen (1972: 45, fn. 23), depending on the analysis (cf. § 1.4.1).

As for the other senses of neutralisation in the literature of 20th-century linguistics, I suggest alternative analyses in terms of

- (1) contextual synonymy: Hjelmslev (1971 [1939]: 94), Dubois (1964), Nida (1975) and Klein (1981)
- (2) contextual homonymy: Godel (1955)
- (3) lexical neutrality: Staib (1985), Timmermann (2007) and Cruse (2000: 258)
- (4) neutrality in categories: Ruipérez (1954: 19), Rappaport (1980: 295-296) and Miestamo (2005)
- (5) syntactic ambiguity: Lyons (1968), Gundel et al. (1986) and Haiman (1980)
- (6) unaccusativity: Schaumyan (1986)
- (7) syncretism/paradigmatic homonymy: Hjelmslev (1971 [1939]: 94), Cantineau (1952), Prieto (1954), Ruipérez (1954: 28), Trnka (1982 [1958] and 1982

- [1974), Greenberg (2005 [1966]: 39-40), Plank (1987) Ingria (1990), Levy and Pollard (2002)
- (8) morpho-syntactic asymmetry: Comrie (1976)
 - (9) referential identity: Lehmann (2000)
 - (10) ellipsis: Rappaport (1980: 295-296)
 - (11) defective distribution: Verstraete (2005) and, depending on the analysis, Martinet (1968), Greenberg (2005 [1966]: 29), Andersen (1972: 45, fn. 23)
 - (12) violation of conversational maxims: Coseriu (1985).

The notion of neutralisation (either optional or obligatory) has proved to be an important heuristic tool for a structuralist linguist in order to deal with the loss of the functionality of a linguistic opposition in certain syntagmatic environments. However, it might be interesting to look at how the phenomena that are subsumed under the term of (optional or obligatory) neutralisation are alternatively analysed by those linguists who do not adhere to the concept of neutralisation as an explanatory device. Taylor (1999), for example, suggests that the use of the term *Tag* to cover a 24 hour period comprising both day and night can be explained with reference to general cognitive principles such as saliency. He argues that “the 24 hour period is designated by its (for most people) most salient component” (Taylor 1999: 30): the day is the period when the sun shines and when people work and are active.

Another interesting topic for further research concerns the relation between (particularly optional) neutralisation and other linguistic concepts such as semantic markedness/marking, autohyponymy or autosuperordination. Jakobson, for example, does not make use of the concept of neutralisation when dealing with semantic phenomena that could be analysed as cases of (optional) neutralisation. Instead, he discusses them under the term of semantic markedness. Using the example of *osěl* ‘donkey’ and *oslíca* ‘female donkey’ (the situation is similar to the pair *dog/bitch* in English), Jakobson argues that the difference between marked and unmarked in lexicon and grammar is between the presence of A and indifference between A and not-A, i.e. the non-specification of either A or not-A (Jakobson 1971 [1932]: 3, 15; 1971 [1936]; 1971 [1939]: 215; 1971 [1940]: 221; 1971 [1957]: 136). This means that within a lexical or grammatical opposition, one member is more specified than the other, in that it bears an extra semantic element (e.g. *oslíca* is specified for female sex), whereas the other lacks any specification for this element and hence is less specified (e.g. *osěl* is unspecified for sex and can be used not only for male donkeys, but also for the category of donkeys in general). In this approach, there is no need for a concept of neutralisation, since the neutral meaning is simply the general meaning of the unmarked term at the level of *langue*. The use of the unmarked term to refer to the opposite of A (i.e. ‘signalisation of not-A’) is a *parole*-meaning of the unmarked term derived from the general meaning. This is unlike Coseriu (and Ruipérez), for whom the oppositional meaning of the unmarked term is a *langue*-meaning. In a similar way, Cruse (2000: 110) argues that certain lexical items can be hyponyms of

themselves, because they have a “default general sense”, and a “contextually restricted sense that is more specific in that it denotes a subvariety of the general sense”. Cruse mentions the example of *dog* in English, which has both a general sense (as in *Dog and cat owners must register their pets* – Cruse 2000: 110) and a more specific reading (as in *That’s not a dog, it’s a bitch* – Cruse 2000: 110). On the other hand, quite contradictorily, Cruse (2000: 111) considers the use of *man* to refer to the human race to be a case of autosuperordination. The question is whether issues such as these can be resolved by considering the notion of neutralisation once it has been clarified and properly defined.

Chapter 2

Neutralisation and semantic markedness: An inquiry into types of lexical opposition in German

In linguistic theory, the concepts of markedness and neutralisation play a central role in describing the asymmetry inherent in numerous linguistic contrasts, or *oppositions*. The two concepts gained wide currency in structural-functional theories on meaning, notably through the work of Roman Jakobson (markedness) and Eugenio Coseriu (neutralisation). Although neutralisation and especially markedness have been the subjects of considerable attention from generations of linguists, the difference between the two concepts regarding the interpretation of the marked/unmarked contrast in semantics has not yet been addressed in scholarly research. One purpose of the present article is to elucidate this theoretical difference. A second aim of the study is to provide empirical evidence, drawn from present-day German, to support the claim that a rigid application of either Jakobson's or Coseriu's theory to all lexical and grammatical relations is problematic. Based on the results of the empirical study, a revised semantic markedness model is outlined.

2.1 Introduction

One of the basic tenets of Greenberg's *Language Universals* (Greenberg 2005 [1966]: vii; 25-26) is that speakers tend to categorise experience in terms of asymmetrically opposed pairs. In a similar vein, Andersen (2001: 25, 2008: 103-105; 116) has more recently pointed to the cognitive primacy of inclusion, claiming that asymmetrical values are imposed on a variety of linguistic contrasts and on other cultural contrasts. Earlier adumbrations of this idea are found in the writings of Hjelmslev (1935: 102, 1971 [1939]: 95-96), who states that language "bears the imprint of a pre-logical mentality" ("le langage porte l'empreinte d'une mentalité *prélogique*", cf. also Andersen 1989: 18) that encroaches upon the diverse types of logico-semantic opposition.¹ More specifically, it is argued that logical oppositions such as contraries (e.g. *long/short*) and contradictories (e.g. *lion/lioness*), which are fundamentally symmetrical and exclusive, are linguistically "construed" (cf. Andersen 2001: 46) as asymmetrical and inclusive such that one of the terms of the opposition functions as both a specific, oppositional term and a generic term that includes its opposite. Several authors, including Greenberg (2005 [1966]: 25) and Coseriu (1992 [1988]: 225), have claimed that the inclusive construal of intrinsically exclusive oppositions is fundamental to natural language. In linguistic description, this construal has been primarily discussed under the heading of *markedness relations*. As is well known, the concept of markedness has found a mixed reception ever since its introduction into theoretical linguistics by Trubetzkoy and Jakobson in the 1930s, ranging from wide acceptance to its recent denouncement as a vacuous and superfluous term by Haspelmath (2006)². In spite of the absence of a uniform definition and the recurrent controversy on the theoretical utility of the concept in linguistics, I agree with Andersen (2001: 25) that markedness may well be a universal cognitive principle that is manifested in speakers' use of language and is part of their linguistic (and ultimately broader cultural) competence.

The idea that speakers have an intuitive understanding of markedness also finds expression in Trubetzkoy's and Jakobson's early discussions of the relationships between correlative phonemes. Thus, in a now famous letter dated July 1930, Trubetzkoy writes to Jakobson that

¹ Hjelmslev himself draws upon the concept of participation, which was introduced in cultural anthropology by Lévy-Bruhl (1910, 1922).

² Because I do not aim to provide a detailed historical account of the concept of markedness, I refer to Eckman, Moravcsik and Wirth (1986), Tomić (1989), Battistella (1990, 1996), Andersen (2001, 2008), and Haspelmath (2006) for extensive overviews of the various facets of markedness theory. A critical review of the basic lines of argumentation in the literature on markedness can be found in Sobkowiak (1997).

[a]pparently every (or perhaps not every?) phonological correlation *acquires in the linguistic consciousness* the form of an opposition between the presence of some feature and its absence (or between the maximum and the minimum of some feature). [...] only one of the members of the correlation *is conceived of* as actively modified, as positively endowed with a certain feature, whereas the other *is felt* as not carrying this feature, as passively unmodified. (Trubetzkoy 1975: 162-163, translation from Andersen 1989: 21; the italics are mine, MDB)

A phoneme that is characterised by the presence of this feature is referred to as *marked* (*merkmaltragend*) while a phoneme that is characterised by its absence is called *unmarked* (*merkmallos*) (Trubetzkoy 1939: 37). Importantly, the asymmetry, which is considered to be imputed to certain types of phonological opposition, is associated with the phenomenon in which only one member of an opposition can occur in certain positions, which Trubetzkoy labelled *neutralisation* (Trubetzkoy 1939: 69-75 – mostly *Aufhebung* in Trubetzkoy's parlance). Typically, the unmarked term has distributional privilege over the marked term. To account for the functional irrelevance of an otherwise operative phonological opposition, Trubetzkoy (1939: 70-71) argues that the unit that occurs in the position of neutralisation should be analysed as consisting of only those features that are common to the members of the neutralisable opposition, i.e. it represents the so-called *archiphoneme*. For example, in the well-known cases of final devoicing, this unit is rendered by the voiceless phonemes, which share all features with their voiced counterparts, except for voicing.

Trubetzkoy's reflections on the concepts of markedness and neutralisation were soon extended to other domains of language as well.³ Within structural linguistics, Trubetzkoy's ideas found particular resonance in the works of Jakobson and Coseriu. In the following section, I will first elaborate on Jakobson's application of the concept of markedness to the field of lexicon and grammar (§ 2.2.1). Subsequently, I will discuss Coseriu's conception of semantic markedness and its concomitant notion of neutralisation (§ 2.2.2). The theoretical aim of the article is to show that although both Jakobson's and Coseriu's theoretical models provide systematic accounts of markedness relations, neither account pays sufficient attention to the variation among different semantic markedness relations in terms of internal organisation. The empirical aim of the article is to adduce evidence for the hypothesis that several types of semantic markedness opposition exist and that they differ according to the way the two terms are opposed to each other. In particular, the article demonstrates that the kind of hierarchical structure in which a semantic opposition is framed according to markedness theory and neutralisation theory varies from one opposition to another. In § 2.2.3, a revised markedness model is outlined

³ For an overview of the concept of neutralisation outside the field of phonology, see De Backer (2009). For the concept of markedness, I refer to the relevant literature cited above.

that takes this variation into account. To test the value of the model, ten German noun pairs are analysed by means of three different research methods, viz. a corpus study (§ 2.3.1.), a sentence processing task (§ 2.3.2.), and an acceptability judgment task (§ 2.3.3). In the concluding section (§ 2.4), the results of the empirical tests are evaluated in view of the modes of opposition discussed in § 2.2.3.

2.2 Asymmetrical relations in lexicon and grammar

2.2.1 Semantic markedness: Jakobson

In Jakobson's linguistic theory, the marked/unmarked dyad is considered as an integral property of the structure of language.⁴ The notion of markedness (and of binarism) is taken to follow directly from the notion of opposition, that is, a linguistic opposition is defined as a "mutually implicating and predicting relationship between two polar opposites of which one is marked and the other is unmarked" (Waugh 1976: 67). Moreover, markedness relations are claimed to be relationally invariant in that they are defined strictly in terms of the paradigmatic relations that constitute the language system: for Jakobson, markedness is not the result of a subjective operation on the part of interpreters but is "given directly in the linguistic system itself" (Jakobson 1990: 137).⁵ Of particular importance is Jakobson's claim that markedness relations differ between the phonological level and the lexical and grammatical level. In phonology, the opposition of marked/unmarked consists of the *presence* vs. *absence* of a certain feature. In other words, the unmarked term is the negative opposite of the marked term (e.g. /d/ presence vs. /t/ absence of voice). In lexicon and grammar, however, the distinction is not between a positive term and a negative term but between a *determinate* term and an *indeterminate* term. That is to say, marked [+feature x] in semantics means that a certain feature is expressed, whereas unmarked [Øfeature x] means that this feature is not expressed

⁴ For a detailed overview of the development of Jakobson's ideas on markedness, see Battistella (1996: 19-34).

⁵ Of particular interest is the typically structuralist focus, documented in the analyses of both Jakobson and Coseriu, (cf. Holenstein 1975: 47-48) on a system-oriented rather than a subject-oriented description of markedness, as if markedness values immanently arise from an impersonal, self-contained language system. It should be noted, however, that neither Jakobson nor Coseriu fail to acknowledge the subject-relatedness of language in general and markedness assignments in particular. In contrast, the speaking subject is introduced in the linguistic theories of both Jakobson and Coseriu as a creative, unconscious, and intersubjective entity (cf. Holenstein 1975: 55-76).

(Jakobson 1971 [1932]: 3; 15, 1971 [1936]: 29-30, Waugh 1976: 94).⁶ To use one of Jakobson's classic examples, *oslíca* 'female donkey' in Russian necessarily carries the feature [+female]. *Osěl* 'donkey', on the other hand, is neutral, uncommitted regarding the feature and hence, [Øfemale]. As a consequence, the reference potential of *oslíca* is restricted to female donkeys, whereas *osěl* can be used to refer to male donkeys, female donkeys or the species of donkeys in general (Jakobson 1971 [1932]: 15). Jakobson's view on the relationship between marked and unmarked in semantics can be represented schematically as in Figure 1.

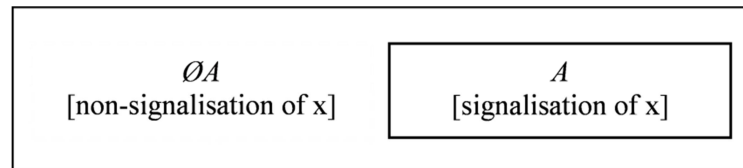


Figure 1: Semantic markedness according to Jakobson

Importantly, according to Jakobson, the opposition between the 'signalisation of x'⁷ (A) and the 'non-signalisation of x' (ØA) pertains to the level of the general meaning of a linguistic unit (the *Gesamtbedeutung* – cf. Jakobson 1971 [1932]: 4, 1971 [1936]: 35, 1971 [1957]: 136), i.e. the linguistically given, invariant meaning. Furthermore, the semantic indeterminacy of the unmarked term gives rise to a dichotomy between the 'non-signalisation of x' and the 'signalisation of non-x'. However, concerning the 'signalisation of non-x', Jakobson's writings on markedness are unclear as to which level of linguistic content this meaning is to be assigned. In the conclusion of his 1932 article on the structure of the Russian verb, Jakobson (1971 [1932]: 15) seems to suggest that the 'signalisation of non-x' represents one of the two *signifiés* of the unmarked term (Jakobson 1971 [1932]: 15 – "Ein und dasselbe Zeichen kann zwei verschiedene *Bedeutungen* besitzen"; the italics are mine, MDB), at least, if *Bedeutung* 'meaning, signification' is to be understood in a technical sense here as a paradigmatically determined language-specific meaning. However, earlier in the article (1971 [1932]: 3-4), Jakobson explicitly states that the assertion of the feature "non-x" in a specific context is only one application ("bloss eine der Anwendungen") of the unmarked term, suggesting that the 'signalisation of non-x' is a contextual variant on the level of discourse. In his later work on markedness, Jakobson remains vague about the precise functional status of the 'signalisation of non-x'. However, from his characterisation of this meaning as the basic meaning of the unmarked term (the *Grundbedeutung*), it would appear that he con-

⁶ This principle is also recognised by Hjelmslev (1935: 101), who states that the structure of the entire language system is based on the opposition between a determinate/definite and an indeterminate/indefinite term ("l'opposition réelle et universelle est entre un terme défini et un terme indéfini").

⁷ The term *signalisation* is adopted from Waugh (1982).

ceived of it as a contextually conditioned variant given that, in Jakobson's theory, the notion of *Grundbedeutung* is normally used for the basic, most typical contextual variant (therefore, it is also called the *Hauptbedeutung*).⁸ Jakobson (1971 [1939]: 215) also points out that the unmarked term may occasionally be used for the 'signalisation of x' ("[...] le signe zéro sert à *désigner précisément A*"; the italics are mine, MDB), e.g. the use of *osěl* to denote a female donkey, which is analysed by Jakobson as a "not proper" contextual variant (cf. also Jakobson 1971 [1936]: 36). In contrast to Jakobson's assumption, I argue that the unmarked term never carries the feature "x" in such situations. In other words, it does not really signal "x": if both the unmarked (*osěl*) and marked (*oslíca*) term can be used in those contexts, then they only have an identical reference (they both refer to a female donkey) but not an identical meaning. In terms of meaning proper, the marked term is more narrowly specified (it specifies the feature [+female]), whereas the unmarked term leaves the specific marking of the marked term unexpressed. Hence, the 'signalisation of x' may be inferred (by means of an implicature, cf. Levinson 2000), but it is not part of what the language itself expresses. In this respect, the 'signalisation of x' is different from the 'signalisation of non-x', which is part of the unmarked term's semantic content. This can be observed in contexts such as *Èto oslíca? Nét, osěl* 'Is that a female donkey? No, a male donkey'.⁹ A further problematic issue in Jakobson's markedness theory is his definition of the unmarked term's general meaning. The definition is not entirely consistent with Jakobson's overall conception of the general meaning as an abstract, generic meaning that is more general than and differentiated from its specific contextual variants (cf. also Waugh 1976: 74-75). Recall that the general meaning is defined as 'non-signalisation of x' (Jakobson 1971 [1932]: 3; 15, 1971 [1936]: 36) or, alternatively, as 'no statement of A' (Jakobson 1971 [1957]: 136), yet the unmarked term's generic, unspecific *use* in discourse is paraphrased in the same manner. An attempt to avoid this theoretical inconsistency has been proposed by Waugh (1975: 440-442, 1976: 92, 1982: 301). Waugh describes the opposition between marked and unmarked on the level of the general meaning as the *necessary* presence or signalisation of a feature vs. the *non-necessary* presence or signalisation of that feature, i.e. absence, presence or non-pertinence. Taking into account all usages of the unmarked term, Waugh then distinguishes between three contextually determined variants, the 'zero-interpretation'

⁸ An alternative interpretation is offered by Haspelmath (2006: 50-52), who analyses the 'signalisation of non-x' as a pragmatic implicature. At the same time, however, he argues that with lexical pairs such as *osěl/oslíca* and *lion/lioness* the 'signalisation of non-x' shows "incipient conventionalization".

⁹ Although the 'plus-interpretation' (the 'signalisation of x') is, in a way, superfluous (in the sense that the unmarked term should not be interpreted as actually carrying the feature "x"), this does not mean that it should be left out of semantic analysis altogether. The possibility of the 'plus-interpretation' points to an unmarked term's potential to substitute for its marked counterpart, which is a property that some unmarked terms possess (e.g. *lion* may take over the reference of *lioness*) and others do not (e.g. *day* cannot replace *night* with an identical reference).

(the actual ‘non-signalisation of x’), the ‘minus-interpretation’ (the ‘signalisation of non-x’) and the ‘plus-interpretation’ (the ‘signalisation of x’). All of these interpretations are said to be derived from one single general meaning that is inherently indeterminate.

2.2.2 The principle of neutralisation: Coseriu

Like Jakobson, Coseriu adopts Trubetzkoy’s marked/unmarked contrast and also applies it to oppositions of lexical and grammatical meaning. Unlike Jakobson, however, he subsumes the concept of markedness under the heading of neutralisation, which constitutes one of the four basic principles of Coseriu’s linguistic theory (along with the principles of opposition, functionality, and systematicity – see Coseriu 1992 [1988]: 170-232). For Coseriu, the defining criterion of phonological neutralisation is the inclusive asymmetry among the members of a neutralisable opposition, i.e. that one of the terms of a phonological opposition (viz., the unmarked one) can function as the common denominator, thereby including the other term of the opposition. Accordingly, semantic neutralisation is defined as the suspension of an opposition between lexical units or grammatical categories, whereby the unmarked term stands for what is common to both terms of the neutralisable opposition. According to Coseriu (1976: 54), the only difference between phonological neutralisation and semantic neutralisation lies in the obligatoriness of the former (phonological oppositions *must* be neutralised in certain positions) as opposed to the optional nature of the latter (semantic oppositions *can* be neutralised in certain contexts), although it appears that in specific contexts, certain semantic oppositions exist with obligatory neutralisation (cf. De Backer 2009). Interestingly, in Jakobson’s and Waugh’s frameworks, the term neutralisation is primarily reserved for the field of phonology. In their view, neutralisation does not involve the inclusion of one linguistic term in another, but neutralisation instead involves a lack of commutation and the concomitant loss of functionality (Waugh 1976: 44). In phonology, when commutation is not possible, the phoneme that occurs in the neutralising position loses its distinctive function. In semantics, however, it is argued that a lack of commutation in certain contexts (e.g. the obligatory use of the subjunctive after *il faut que* in French) does not deprive a lexical unit or grammatical category of its meaning. On the contrary, lexical and grammatical items always retain their “significative” function (Waugh 1982: 299-306). Therefore, cases of non-commutation are not seen as evidence for neutralisation (i.e. a lack of meaning) but as a strong indication of the meaning of a particular unit (Jakobson 1958: 111, Waugh 1976: 44 and 1982: 306). Hence, Jakobson and Waugh claim that the notion of neutralisation is untenable outside the field of phonology. It is clear, however, that Jakobson’s and Waugh’s definition of neutralisation in lexicon and grammar, as well as their judgments about the acceptability of its extrapolation, depend to a significant

extent on the aspects that are taken to be criteria for neutralisation in phonology (either inclusion or lack of commutation).

One further point of divergence concerns how the contrast between marked and unmarked is understood in phonology and semantics, respectively. Whereas for Jakobson and Waugh, phonological and semantic markedness relations are defined differently, Coseriu draws a close analogy between the two types of markedness (Coseriu 1978 [1964]: 109). In the fields of both phonology and semantics, Coseriu describes markedness as the *presence* of a certain feature (A), while unmarked is described as the *absence* or the *negation* of this feature (not-A). By virtue of its negative characterisation, the unmarked term is not constrained to a single function, which accounts for the fact that it can be used with either a specific, oppositional meaning (e.g. the use of *man* to denote a male person) or a generic, neutral meaning (e.g. *man* in the sense of human being). As the term neutralisation suggests, the oppositional meaning has functional precedence over the neutral meaning (because it is also the meaning that directly follows from the principle of opposition – cf. Coseriu 1992 [1988]: 201-209). However, regarding their semantic status, both meanings are equally classified as two well-delimited *signifiés* (Coseriu 1992 [1988]: 218).¹⁰ This classification is in contrast with the view held by Waugh (and arguably also by Jakobson), according to which there is only one imprecise, inherently neutral *signifié*. The unmarked term's 'bifunctionality' is visualised by Coseriu as in Figure 2.

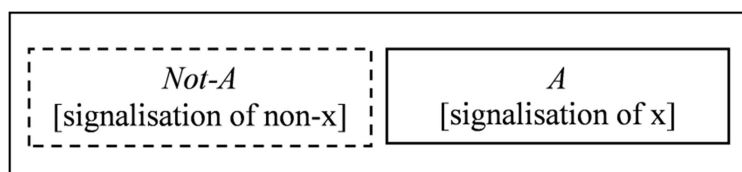


Figure 2: Neutralisation according to Coseriu

Figure 2 shows that the primary opposition is between (to use Jakobson's terminology) the 'signalisation of x' (A) and the 'signalisation of non-x' (not-A). However, the unmarked term's potential for the neutral meaning (the 'non-signalisation of x') is structurally motivated, as indicated by the broken line (cf. Coseriu's *neutralisability*, 1992 [1988]: 220-221). That is, the neutral *signifié* corresponds to the entire semantic space comprised by a neutralisable opposition (therefore, it is called "not-A+A", Coseriu 2000 [1990]: 30). In Coseriu's writings on neutralisation, no explicit mention is made of the so-called 'plus-interpretation' of the unmarked term. It seems, therefore, that Coseriu concurs with the view expressed above that the 'signalisation of x' is already incorporated in the

¹⁰ The acceptance of two *signifiés* in the case of neutralisable oppositions is a controversial issue in Coseriu's semantic theory, particularly because it seems to contradict the structuralist principle of homogeneous meanings (*monosemy*). For a discussion of the problematic semantic status of the unmarked term in Coseriu's writings, see De Backer (2010).

unmarked term's neutral *signifié* and hence should not be analysed as being actually expressed in a particular discourse context.

2.2.3 Hypothesis and methodology

From the above discussion, it may be concluded that, in post-Trubetzkoyan systemic theories, the relationship between marked and unmarked in semantics has been described in two ways: either as the opposition between the plus-value of a feature and a corresponding zero-value (Jakobson/Waugh) or as the opposition between the plus-value of a feature and the minus-value of that feature (Coseriu). Although both theories try to account for native speakers' implicit grasp of markedness in a systematic and coherent way, I will argue in the remainder of this article that a rigid application of either of these descriptive models to all lexical and grammatical relations fails to recognise that *different* semantic oppositions may present *different* markedness relations. More specifically, I will show that whereas some oppositions are initially construed by native speakers as "A vs. not-A" (i.e. the 'signalisation of x' vs. the 'signalisation of non-x'), other oppositions are encoded as "A vs. not-A+A" (i.e. the 'signalisation of x' vs. the 'non-signalisation of x'). A similar view has been expressed by Chvany (1992: 62), who states that:

[t]here is a built-in tension in language between oppositions [...], which are privative - "A vs. non-A" - and oppositions [...] - according to Jakobson 1957, "A vs. no statement of A" - which I call subordinative.¹¹

The basic idea of this hypothesis is as follows: while in some oppositions it is the specific, oppositional meaning that constitutes the unmarked term's primary meaning, in other oppositions it is the generic, neutral meaning that has functional priority over the oppositional one. This variation is reflected not only in linguistic change (the development of specific meanings from generic meanings or vice versa) but also in the synchronic structure of language. Accordingly, the hypothesis is advanced that the logically exclusive and linguistically inclusive mode of opposition as described in the introductory sections (and as exemplified by oppositions such as *long/short*, *lion/lioness*, *man/woman*) can be placed on a continuum alongside the logically and linguistically exclusive mode of opposition, on the one hand (e.g. *king/queen*), and the logically and linguistically inclusive mode of opposition (e.g. *flower/rose*), on the other. Figure 3 provides a schematic overview of the proposed modes of opposition.

¹¹ Note that I will not follow Chvany's terminology in this article.

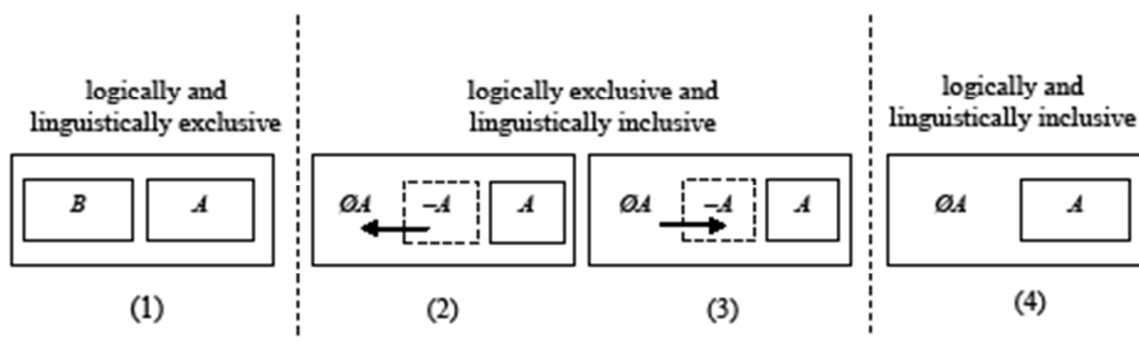


Figure 3: The various modes of opposition and semantic markedness relations

On the left are oppositions that are symmetrical and non-neutralisable; in this category, neither term is cast as potentially bifunctional (1).¹² Regarding these oppositions, Andersen (2001: 44-45) points out that in some cases, one of the terms of an inherently exclusive opposition may nevertheless be “cognised” as an inclusive term, in particular, by analogy with similar types of opposition in the language system. For example, in English, *father* does not normally have generic reference. However, its “virtual status of hypernym” (Andersen 2001: 45), given that it is usually the masculine term that has generic reference potential in English, is realised in *forefathers*.¹³

Further up the scale are oppositions that are characterised by an inclusive construal such that one of the terms of the opposition has two functions. Importantly, in some instances of this kind, the specific, oppositional meaning has functional priority over the neutral, generic meaning (2), whereas the reverse is true in other instances (3).

Finally, on the right-hand side of the scale are oppositions that are intrinsically asymmetrical and inclusive, i.e. one of the terms simply serves as the superordinate term that semantically incorporates one or more sub-terms (4). In categories (1) and (2), the oppositional meaning is predominant, whereas in categories (3) and (4), the neutral meaning has functional precedence.

To test the viability of this hypothesis empirically, a number of German oppositions are investigated. For the sake of clarity, the focus will be on ten lexical noun pairs in which one of the terms has traditionally been described as “unmarked” in some sense (however, it is assumed that the proposed approach is applicable to lexical oppositions of adjectives and oppositions of grammatical meaning as well, e.g. *groß/klein* ‘big/small’, *freundlich/unfreundlich* ‘friendly/unfriendly’, *wild/zahm* ‘wild/tame’; present/past/future tense, singular/plural). The following lexical oppositions are examined in the empirical analysis: *Mann/Frau* ‘man/woman’, *Tag/Nacht* ‘day/night’, *Löwe/Löwin* ‘lion/lioness’, *Katze/Kater* ‘cat/tomcat’, *Arzt/Ärztin* ‘male doctor/female doctor’, *Student/Studentin* ‘male

¹² Strictly speaking, then, neither of the two terms is semantically marked or unmarked.

¹³ The reverse of this, viz. the exclusive construal of inherently inclusive oppositions, does not seem to occur.

student/female student', *Vater/Mutter* 'father/mother', *König/Königin* 'king/queen', *Fahrzeug/Wagen* 'vehicle/car' and *Blume/Rose* 'flower/rose'. To determine the internal structure of each opposition, the following methods are used:

- *corpus study*: the corpus that is investigated for this study comprises 1000 examples (100 sentences per unmarked term) randomly retrieved from COSMAS II.¹⁴ The sample thus collected was transferred to a database created with *Filemaker* (Filemaker Pro Advanced 9.0v3) and semantically annotated. The general hypothesis is that the textual frequency of the observed meanings should tend to correlate with the unmarked term's inherent semantic structure: a higher frequency of oppositional uses might be interpreted as indicative of the functional primacy of the oppositional meaning; a higher frequency of neutral uses might point to a functional priority of the neutral meaning. I am deliberately cautious in my formulation here because the degree to which frequency may reflect the system-internal structure of oppositions is a controversial issue, especially in structural-functional theories of meaning (Jakobson 1971 [1932]: 4).
- *two off-line experiments*: first, in a sentence processing task, 60 participants are asked to make a sentence with the unmarked term of each lexical opposition. The subjects are native German speakers studying linguistics at the University of Tübingen. The subjects are between 19 and 28 years old; 21 are male and 39 are female. The hypothesis is that the primary meaning will be used more frequently. Second, a questionnaire is designed to assess participants' perceptions of the acceptability of certain sentence frames. For this purpose, the same subjects who performed the sentence processing task are presented with a series of sentences to rate on a five-point Likert scale. The hypothesis is that the degree of acceptability of certain frames is related to the structural relation that holds between the members of the examined lexical oppositions. To collect the data, an email was sent to the participants that provided them with a hyperlink to the survey, which contained both tasks.

Finally, the question of whether the oppositional and neutral meaning should be analysed as two *signifiés* or with only one of them as a *signifié* and the other as a contextual variant, remains a difficult issue altogether. First, it rests on the degree of conventionalisation one assumes for either or both of these meanings (as noted by Haspelmath 2006: 51-52). Second, it depends on the (particularly structurally oriented) linguist's willingness to accept two *signifiés* for one linguistic item, which, after all, constitutes a major challenge to the structuralist belief that words (as well as syntactic structures) are homogeneous

¹⁴ COSMAS II (Deutsches Referenzkorpus, DeReKo) is a German corpus made available by the *Institut für Deutsche Sprache* (Mannheim). It mainly consists of newspaper articles and currently contains about 5.3 billion words.

(monosemous) on the systemic level (the *langue*). A useful discussion of the problem is found in Van Der Gucht (2005: 166-167), who introduces the term *duosemy* to refer to the existence of exactly two *signifiés* pertaining to one single *signifiant*, viz. the unmarked term of neutralisable oppositions (cf. also De Backer 2010: 548). In the present article, the view is taken that the apparently immediate accessibility of both meanings by native speakers is one reason to believe that one of the meanings is not simply a variant or effect of the other. Hence, an analysis of the observed bifunctionality in terms of duosemy seems justifiable. However, this article does not pretend to offer a full empirical examination of this particular issue and leaves its definitive analytical treatment to future investigations.

2.3 Empirical analysis

2.3.1 Corpus study

This section focuses on the functional potential of the unmarked term, the actual occurrence of its possible meanings in a concrete sample, and the frequency of these actualisations. Before discussing the results of the corpus study, however, I would like to draw attention to the possibility of looking at the corpus examples from two different perspectives. Of particular interest in this respect is the unmarked term of the logically exclusive and linguistically inclusive mode of opposition (cf. types (2) and (3) in Figure 3). From a semasiological perspective (i.e. from the point of view of the language system), the unmarked term of such oppositions may possess two meanings (or *signifiés*), viz. an oppositional and a neutral one. From an onomasiological perspective (from the point of view of reference), however, there are four possibilities, for which I propose the following terminology:

- ‘oppositional/minus-reference’: reference to –A through the unmarked term’s oppositional meaning, either in implicit or explicit contrast with the marked term of the opposition, e.g. *Alle Studentinnnen und Studenten müssen ein Referat halten* ‘All female students and male students must present a paper’;
- ‘neutral/minus-reference’: reference to –A through the unmarked term’s neutral meaning, e.g. *Er ist Student* ‘He is a student’;

- ‘neutral/plus-reference’: reference to *A* through the unmarked term’s neutral meaning: e.g. *Sie ist Student* ‘She is a student’¹⁵;
- ‘neutral/zero-reference’: reference to $\emptyset A$ through the unmarked term’s neutral meaning, e.g. *Studenten sollten regelmäßig den Kurs besuchen* ‘Students should regularly attend the course’.

In the analysis of the corpus, a considerable number of examples were ambiguous between two (or more) of the above-mentioned onomasiological categories. For the sake of argument, consider the following example: *Ein Student bezichtigt Goethe der Mutlosigkeit* ‘A student accuses Goethe of despondence’ (St. Galler Tagblatt, 12.11.2001). From the point of view of interpretation, it is difficult to evaluate whether the referent of *ein Student* may be either a male or a female person (‘neutral/zero-reference’) or a male person only and, if the latter option is intended, whether the speaker/writer intended this through the unmarked term’s oppositional meaning (‘oppositional/minus-reference’) or through its neutral meaning (‘neutral/minus-reference’).¹⁶ Due to a lack of evidence as to the type of reference that might have been envisaged by the speaker/writer, more subtle distinctions among a zero-reference, minus-reference and plus-reference were not integrated into the frequency table (cf. Table 1 below), for which only the categories ‘neutral’ and ‘oppositional’ were retained. The various onomasiological categories will recur, however, in the discussion of the corpus results to illustrate the differences in reference potential between the various lexical units under discussion. For cases that could be interpreted in a neutral or oppositional manner, a *default* or *preferential* meaning was established. Accordingly, in the analysis, four semantic categories were distinguished, viz. ‘neutral’, ‘oppositional’, ‘unclear, but preferentially neutral’, and ‘unclear, but preferentially oppositional’. Note that the very existence of (interpretational) ambiguity is indicative of the semantic nature of a particular unmarked term. In other words, unmarked terms that may be used both oppositionally and a neutrally show a stronger tendency to be ambiguous in certain contexts. Phrases and sentences that exist as fully conventionalised form-meaning pairings in the German language system (idiomatic cases that belong to *repeated discourse*, Coseriu 1976: 24-27) were left out of the analysis.¹⁷

¹⁵ It should be noted that this syntagmatic combination is highly unusual, if not ungrammatical, in German (*Sie ist Studentin* being the normal expression). A quick Google search shows that it only occurs in forums and blogs. To compare, *Zij is student* in Dutch is much more acceptable, and *She is a student* in English is perfectly normal.

¹⁶ In German, the option that *ein Student* would refer to a female student (‘neutral/plus-reference’) in referential contexts (i.e. contexts in a specific spatio-temporal setting with one or more specific referents) is very unlikely.

¹⁷ In the case of *Mann*, however, some examples that would normally fall under the category of idiomatic examples were nevertheless incorporated into the analysis because they proved to be interesting for the analysis (cf. § 2.3.1.2).

As noted above, although a tendency for the primary meaning to be used more frequently is expected, the extent to which textual frequency is indicative of the systemic status of a particular meaning must be considered with due reserve because it may correlate with other parameters that are not system-internal but system-external. For example, textual factors such as text type or non-linguistic factors – e.g. ontological frequency (i.e. “frequency in the world”, Haspelmath 2006: 21), the broader historical-cultural context, or the personal preferences of the speaker/writer – might have an influence on the frequency of a certain meaning. Importantly, in this study, frequency is always regarded as a *symptom* of system-internal relations, not as an *explanatory* or a *defining criterion* of these relations, regardless of whether the observed frequencies may be entirely explained by the existing system-internal relations. To put it differently, the hypothesis advanced in this article that different lexical oppositions present different markedness relations considers the internal structure of various lexical oppositions as, in principle, independent of textual frequency. Under this view, differences in the distribution of meanings (e.g. neutral vs. oppositional) occur as a result of differences in internal structure. If a correlation is observed between semantic structure on the systemic level and textual frequency on the level of discourse, the latter is considered to be a manifestation of the former.¹⁸

Before proceeding to a more detailed discussion, I present a summary of the results of the corpus study in Table 1.

¹⁸ This view is corroborated by Andersen (2001: 50) and Itkonen (2005: 359), who says that “structure is primarily existent, and only secondarily ‘emergent’”.

Table 1: Summary of the results of the corpus study

	neutral	oppositional	unclear		TOTAL
			pref. neutral	pref. opp.	
Vater	1	99	0	0	100
König	2	96	2	0	100
Mann	8	92	0	0	100
Tag	63	21	9	7	100
Student	69	10	4	17	100
Arzt	70	6	4	20	100
Löwe	71	15	12	2	100
Katze	91	9	0	0	100
Fahrzeug	100	0	0	0	100
Blume	100	0	0	0	100

2.3.1.1 Vater/Mutter ‘father/mother’ – König/Königin ‘king/queen’

According to Klappenbach/Steinitz, the lexical items *Vater* (1978: 2170) and *König* (1980: 4011-4012) are constrained to a single function, viz. ‘a male parent’ and ‘a male monarch’, respectively. Accordingly, it is argued that both terms are symmetrically opposed to their respective counterparts (*Mutter* and *Königin*). This hypothesis is supported by the results of the corpus study: as shown in Table 1, 99 examples of *Vater* and 96 examples of *König* were found to be semantically oppositional.¹⁹ Nonetheless, in spite of their inherently exclusive semantic nature, both terms seem to belong to the category of words that may be conceptually framed in terms of asymmetrical markedness values, albeit on the basis of the appearance of neutral uses in very restricted types of context. Their potential for generic reference is observed in examples such as (1) and (2):

- (1) Warum entschied er sich für Deutschland und nicht für **das Land seiner Väter**? [*Why did he choose for Germany and not for the land of his forefathers*] (Hamburger Morgenpost, 07.10.2010)
- (2) Zu sehen sind Schätze aus der Pharaonenzeit, die schönsten Gräber **im Tal der Könige** [*the most beautiful tombs in the Valley of the Kings*] und natürlich die berühmte Gesichtsmaske von Tutanchamun, [...]. (Salzburger Nachrichten, 09.10.1998)

¹⁹ Examples in which *Vater* meant ‘patron’ or ‘originator, creator’ were omitted from the analysis (e.g. *die Niederlagen haben schon mehrere Väter*, “*Vater*” *der Special Olympics* ist [...], *Bei der Vernissage bedankte er sich nicht nur beim “Vater dieser Ausstellung” [...]*). In these examples, the meaning that is realised no longer concerns the gender difference between *Vater* and *Mutter* or its neutralisation. Cases where *König* referred to ‘a playing card bearing the picture of a king’ and ‘the chief piece in a chess game’ were also excluded from the analysis.

In (1), *Väter* must be understood in the sense of ‘forefathers, ancestors’, which is, however, an obsolete use of the term as indicated by the Duden dictionary (1999: 4170).²⁰ *Könige* in (2) may be interpreted as neutral, in that it also includes a number of female rulers.²¹ The bias towards a default male interpretation remains strong in both cases, particularly in view of the patriarchal organisation of ancient cultures. Moreover, the use of *Könige* instead of, e.g. *Könige und Königinnen* may be motivated by the higher ontological frequency of male kings in the history of Egyptian rulers, so that it has become conventional to refer to the burial place of the ancient rulers by means of the masculine term alone. For both *Vater* and *König*, neutral uses (if they occur at all) are limited to the plural. In the singular, reference is confined to male persons, especially because both terms are associated with specific individuals.

2.3.1.2 Mann/Frau ‘man/woman’ – Tag/Nacht ‘day/night’

The German noun *Mann* behaves much like *Vater* and *König*. As expected, oppositional uses (*Mann* referring to ‘an adult male person’) were much more frequent than neutral uses (*Mann* in the sense of ‘person’²²), which only occur in specific types of context. Although these neutralisation contexts are highly conventional and idiomatic in nature, they are nevertheless integrated into our corpus analysis of *Mann*, especially because they document a neutral meaning that may still be viewed as semantically incorporating both *Mann* and *Frau*. In the sample, 92 oppositional and 8 neutral uses were found. Typically, neutral *Mann* occurs in contexts with reference to a certain *number* of people, where *Mann* is preceded by a numeral greater than one and does not take a plural number marking (cf. also Lehmann 2000), as in example (3):

- (3) “Ich brauche **acht Mann** und einen ganzen Tag, um [“*I need eight people and an entire day to (...)*”] eine Platte nach oben zu transportieren”, so Schnabel. (Nürnberger Nachrichten, 10.07.2003)

compare:

- “Ich brauche **acht Männer** [*I need eight men (...)*]: oppositional
- “Ich brauche **einen Mann** [*I need a man (...)*]: oppositional
- * “Ich brauche **acht Frau** (...) [**I need eight woman (...)*]: ungrammatical

²⁰ Note, however, that the neutral variant of *Vater* in German differs from, for instance, the neutral use of *padres* in Spanish, which has the meaning of ‘parents’ (father and mother) rather than of ‘ancestors’.

²¹ For example, Tiaa, who ruled Egypt during the eighteenth dynasty (cf. Ziegler 2008: 385).

²² Interestingly, neutral *Mann* (‘person’) in German is different from neutral *man* in English. The latter term is used for the more general meaning ‘human being, the human race’. In German, this meaning is rendered by another noun, viz. *Mensch*.

Additionally, neutral uses of *Mann* were attested in the following highly idiomatic examples²³:

- (4) Einzig die ÖDP übte Kritik: “Umgerechnet 105 Euro **pro Mann** [*105 euros per head*] nur für Fressen und Saufen, das ist zu viel”. (Nürnberger Nachrichten, 28.10.2004)
- (5) “**Alle Mann an Deck**, Frauen und Kinder zuerst [*All hands on deck, women and children first*”], die Männer immer mir nach”, (...). (Nürnberger Nachrichten, 11.08.1998)
- (6) Diese Inszenierung, die Hunderte von Menschen durch eine hoch technisierte Wildnis führt, hat etwas wundervoll Theatralisches. **Alle Mann hoch** [*The whole lot of them*] werden sie an der Station von lächelnden Ordnungskräften in offene Tram-Wagen gewiesen. (Frankfurter Rundschau, 31.12.1999)

In all of the above examples, the reference of *Mann* remains unspecified (‘neutral; zero-reference’). In some cases, however, the reference is to male persons only, although *Mann* can be said to be used with its neutral meaning (‘neutral; minus-reference’). For instance, in (7), *zwei Mann* refers to two players of a male hockey team:

- (7) Selbst 66 Sekunden **mit zwei Mann mehr** [*even 66 seconds with two more players*] ließen die Freezers ungenutzt verstreichen. (Mannheimer Morgen, 05.01.2008)

Examples where neutral *Mann* refers to female persons alone did not occur in the sample. Although this seems possible, it is very unusual and would often result in smiling or correction (cf. Lehmann 2000: 2).

The potential for both an oppositional and a neutral use is much more pronounced in the case of *Tag*. As its first meaning, Klappenbach/Steinitz (1980: 3681) mentions the neutral one (‘a period of 24 hours’). The Duden dictionary (1999: 3843), however, presents the oppositional meaning (‘the time between sunrise and sunset’) as its first meaning. Looking at the corpus examples, a predominance of neutral uses is observed (63 neutral and 21 oppositional uses), lending support to the description of Klappenbach/Steinitz.

However, a straightforward interpretation of *Tag* is not always self-evident, particularly in contexts where *Tag* is used in the singular (this was found in previous studies as well, e.g. De Backer 2010²⁴). Consider the following examples:

- (8) a. Erster Höhepunkt der Aktionswochen soll der jetzige Sonntag werden [...]. **An diesem Tag** [(...) *will be this Sunday* (...). *On this day* (...)] bietet eine Vielzahl von Geschäften besondere Aktionen. (Rhein-Zeitung, 21.10.2000)

²³ Proverbs such as *etwas an den Mann bringen* ‘to find a buyer/an audience for’ or *mit Mann und Maus untergehen* ‘go down with all hands’ also belong in this class of examples.

²⁴ In this earlier article, however, many ambiguous examples were eventually analysed as neutral instantiations of *Tag*. In this study, only a preferential or a default interpretation of such ambiguous cases is provided.

- b. “Ich will mit Spielern arbeiten, die grosses Talent besitzen. Und dass sie machen, was ich will, das ist die Basis. Dafür müssen sie **jeden Tag** hart arbeiten, **jeden Tag, jeden Tag**.” [*I want to work with players with great talent (...) they must work hard every day, every day, every day*] (Zürcher Tagesanzeiger, 27.01.1996)
- (9) a. Ganz anders sah es dagegen am **Morgen** aus. Viele hatten ihre Lebensmitteleinkäufe schon ganz **früh an diesem Tag** erledigt. [*It was totally different in the morning. Many people had finished their grocery shopping early that day*] (Mannheimer Morgen, 27.12.1995)
- b. Leuprecht kennt vor allem auch die menschliche Problematik der Arbeitslosigkeit; das Gefühl, wertlos, nutzlos zu sein: “Es gibt Leute, die sich monatelang einigeln. Andere gehen **jeden Tag in der Früh** aus dem Haus, nur damit die Nachbarn nichts merken.” [*Other people leave their houses early each day, just so that the neighbours wouldn't notice anything*] (Vorarlberger Nachrichten, 25.04.1997)

In (8a) and (8b), a neutral interpretation is preferred, particularly because, in (8a), *an diesem Tag* is co-referential with *der jetzige Sonntag* ‘this Sunday’. Due to the repetition of *jeden Tag* in (8b), the temporal expression would have to be analysed in the sense of ‘always, every time’, without a specific focus on the daytime period. In (9a) and (9b), an oppositional interpretation is more likely because the temporal expressions *an diesem Tag* and *jeden Tag* are further specified by *früh/in der Früh* ‘early’ (and additionally by *Morgen* in the pretext in 9a), suggesting an explicit focus on the (beginning of a) daytime period. In the corpus, 16 examples had ambiguous interpretations. Among these, 9 examples are preferentially analysed as neutral and 7 as oppositional. The finding that *Tag* more often appears as a neutral term in the corpus may be due to the frequent application of *Tag* in temporal expressions with a relatively fixed constructional pattern, particularly in the following contexts, which are frequent in newspaper reports:

- (a) *temporal distance*: x Tag(e) vor/zuvor/früher/eher/bevor ‘x day(s) before/earlier’, x Tag(e) nach/später/nachdem ‘x day(s) after/later’, vor x Tag(en) ‘x day(s) ago’ or nach x Tag(en) ‘after x day(s)’.
- (b) *time span indicating the temporal frame of an action*: in den kommenden Tagen ‘in the next few days’, am heutigen Tag ‘on the present day’, an diesem Tag ‘on this day’, in den letzten Tagen ‘during the last few days’, den gestrigen Tag ‘the previous day’, and so on.
- (c) *duration*: x Tag(e) lang ‘x day(s) long’, für x Tag(e) ‘for x day(s)’.
- (d) *frequentative determination*: jeden Tag/alle Tage ‘every day’.

In the absence of an explicit contrast with *Nacht*, the insertion of *Tag* in such temporal expressions does not usually elicit the concept of one or more daytime periods, especially if *Tag* is in the plural. It seems that *Tag* is selected to fill the ‘temporal slot’ in these

expressions because it is the basic calendrical unit of our time-reckoning system, thus the opposition between *Tag* and *Nacht* tends to fade into the background.²⁵ Therefore, an analysis of *Tag* in terms of a ‘24-hour period’, or even more general time concepts such as ‘period of time’ or ‘location in time’, is often more likely in these expressions. Moreover, the daytime period is always *contained* in the larger time period of 24 hours, so a neutral interpretation of *Tag* is not necessarily at odds with the observation that the action referred to in a particular context likely occurs during the daytime. For example, in (10), *Tag* may be interpreted as oppositional (if the semantic scope of *Tag* is considered as restricted to the daytime period) or as neutral (if *Tag* is considered to refer to ‘the previous calendar day’, comprising 24 hours – even though most of the talks took place during the daytime):

- (10) Präsident Bush verbrachte **den gestrigen Tag** in Washington damit, in Sitzungen mit dem Kongress und mit Regierungsmitgliedern das weitere Vorgehen zu besprechen
[President Bush spent the previous day in Washington discussing future plans with the Congress and members of Parliament]. (Die Südostschweiz, 07.09.2005)

It might be argued, then, that the aforementioned frames are constructions with incipient conventionalisation,²⁶ i.e. not yet fully conventionalised form-meaning pairings that function as triggers for a neutral interpretation of *Tag*.²⁷ The incomplete conventionalisation of these constructions accounts for the dynamic tension between an oppositional interpretation and a neutral interpretation that exists in a number of contexts (cf. examples 8 and 9 above).

The above discussion indicates that *Tag* is less explicitly geared to either the oppositional or the neutral meaning. In contrast, in the case of *Mann*, the oppositional meaning has clear functional precedence over the neutral one. In addition, corpus data show that *Tag* may be used to refer to the light part of a 24-hour period (‘oppositional/minus-reference’) or the 24-hour period as a whole (‘neutral/zero-reference’), but never in reference to the dark part of a 24-hour period (‘neutral/plus-reference’). In this respect, *Tag* is similar to *Mann*, for which the possibility to substitute for its marked opposite (*Frau*) is restricted to idiomatic contexts where *Mann* is morphologically marked by the absence of plural marking. Therefore, the corpus study results remain unclear as to whether the oppositional or neutral meaning constitutes the primary meaning of *Tag*. Whereas the higher frequency of neutral uses in the sample points to a functional priority

²⁵ Note that for some of these contexts, viz. duration and temporal distance, *Nacht* was used as a neutral term in older stages of the language (cf. Willems 2005: 425 and De Backer 2010: 557-558).

²⁶ The term is from Haspelmath (2006: 52, cf. also footnote 7).

²⁷ The following type of expressions were omitted from the analysis because they exist as fully conventionalised form-meaning pairings in the German language system: *dieser Tage* ‘recently, nowadays’, *eines Tages* ‘one day, once’, *bessere Tage gesehen haben* ‘having experienced better times’, *goldene Tage* ‘great times’, etc. Of course, such expressions constitute semantic extensions of the neutral meaning of *Tag*.

of the neutral meaning, the impossibility (and, hence, non-occurrence) of plus-reference suggests that *Tag* is not as ‘inherently neutral’ as lexical items such as *Katze* or *Löwe*, which can take over the reference of their marked opposites (cf. § 2.3.1.3). Moreover, as mentioned earlier, the high frequency of neutral uses might also be due to the frequent occurrence of *Tag* in a particular set of fixed expressions that are typical of a certain text type (news coverage) and, hence, might not correlate with the system-internal structure of *Tag*.

2.3.1.3 Student/Studentin ‘male student/female student’ – Arzt/Ärztin ‘male doctor/female doctor’ – Löwe/Löwin ‘lion/lioness’ – Katze/Kater ‘cat/tomcat’

The lexical units *Student*, *Arzt*, *Löwe*, and *Katze* constitute interesting case studies. In particular, they exhibit a greater functional potential than the lexical units discussed thus far, including cases where they may substitute for their marked opposites in specific contexts (although the degree of acceptability of such substitutions varies from one lexical unit to another, see § 2.3.3). In Klappenbach/Steinitz, the words *Löwe* (1978: 2400), *Katze* (1978: 2059), and *Student* (1980: 3646) are paraphrased as gender-neutral terms. In the paraphrase of *Arzt* (1978: 221), the oppositional, gender-specific meaning is emphasised (given that *Arzt* is described as a *Fachmann* ‘male expert’). However, the examples provided as illustrations are in fact neutral (or at least, preferentially neutral) instantiations of *Arzt*, e.g. *der behandelnde Arzt* ‘the doctor in attendance’, *den Arzt rufen* ‘to call the doctor’, and so on. In the Duden dictionary (1999), only the neutral meaning is specified for all four lexical units.

As indicated in Table 1, an analysis of the corpus examples reveals that for this group of words, neutral uses predominate. This finding suggests that the neutral meaning has functional precedence over the oppositional one. Neutral instantiations include general statements about students, doctors, lions, or cats in generic contexts (11) and well-established combinations such as *zum Arzt gehen* ‘to go to the doctor’ or *den Arzt anrufen* ‘to call the doctor’ or references to a mixed group of individuals in specific-referential contexts (12)²⁸:

- (11) a. [...] der Kanton [bezahlt] doch für **einen Studenten** an einer Universität [...] zwischen 20 000 und 40 000 Franken jährlich. [(...) *pays for a university student 20,000 to 40,000 Swiss francs each year*] (St. Galler Tagblatt, 26.04.1999)

²⁸ Proverbs such as *lachen, bis der Arzt kommt* ‘to laugh incessantly’, *die Katze aus dem Sack lassen* ‘to divulge a secret, especially inadvertently or carelessly’, *sich in die Höhle des Löwen wagen* ‘to approach a feared or influential person’, etc. were excluded from the analysis. Cases where *Löwe* was used as a proper name were also omitted.

- b. **Der Arzt** spricht dann von Verstopfung, wenn weniger als drei mal wöchentlich eine Stuhlentleerung erfolgt. [*The doctor diagnoses constipation, if (...)*] (Neue Kronen-Zeitung, 12.06.1999)
 - c. **Die asiatischen Löwen** gehören zu den bedrohten Großkatzen. [*The Asiatic lions belong to the endangered big cats*] (Rhein-Zeitung, 15.05.2007)
 - d. Im Gegensatz zu fast allen anderen Säugetieren lassen sich **Katzen** nicht mit Süßigkeiten locken. [*(...) cats are not easily lured into sweets*] (Mannheimer Morgen, 25.07.2005)
- (12) a. 2500 Schüler und **Studenten** [*2,500 pupils and students*] zogen mit Transparenten und Flugzetteln von der Universität in der Akademiestraße zum Alten Markt. (Salzburger Nachrichten, 18.10.1995)
- b. Als “sehr kritisch” bezeichneten **die Ärzte** am Mittwoch den Gesundheitszustand des kroatischen Präsidenten Franjo Tudjman. [*The doctors called the physical condition of the Croatian president Franjo Tudjman “very critical”*] (Die Presse, 09.12.1999)
 - c. Die Tierschutzorganisation “Vier Pfoten” wird **die Löwen** aus dem Safaripark Gänserndorf in das Großkatzenrefugium “Lions Rock” (Südafrika) übersiedeln [*The animal welfare society “Vier Pfoten” will move the lions of the wildlife reserve (...)*]. (Niederösterreichische Nachrichten, 11.09.2007)
 - d. Leute bringen ihre Hunde, **Katzen**, Vögel, Meerschweine und andere Tiere zu Dr. Peter Kürsteiner. [*People bring their dogs, cats, birds, guinea pigs and other animals to Dr. Peter Kürsteiner*] (St. Galler Tagblatt, 11.08.1998)

At the same time, however, the corpus shows that within this group, the unmarked term tends to become less inclusive as one moves up the animacy hierarchy.²⁹ Generally, it seems that with animals, the difference between male and female is often less relevant to the speaker. This is especially so if the physical difference between male and female is not immediately clear. This finding explains why *Katze* appears as the most inclusive term in the sample, with 91 neutral and only 9 oppositional uses. In many instances, the information about whether one is dealing with a male or a female cat is arguably unknown to the speaker. Hence, even in referential contexts such as *Plötzlich tauchte eine Katze auf der Straße auf* ‘Suddenly a cat showed up on the street’ (Rhein-Zeitung, 25.10.2003), there seems to be no intentional focus on a female cat alone.

A high number of neutral uses were also attested with *Löwe* (71 clearly neutral uses). However, given the sexual dimorphism among lions (male lions being characterised by manes, a larger body, etc.), it does not come as a surprise that *Löwe* is somewhat less inclusive than *Katze*. The stronger tendency to provide gender-specific interpretations of *Löwe*, particularly in referential contexts, may also be connected with gender stereotypes given that the strength and ferocity of lions is associated with masculinity. For example, the image of a yawning lion that is evoked in (13) would typically be a male lion. In (14),

²⁹ cf. the animacy hierarchy formulated by Silverstein (1976).

the presence of *das Weibchen* ‘the female (lion)’ in the verbal cotext indicates that *Löwe* is used as an oppositional term in this example as well:

- (13) Malerische Sonnenuntergänge, grasende Zebras, elegant dahin gleitende Giraffen, **ein gährender Löwe** - die Bilder Ostafrikas sind von vielen Klischees geprägt. [*Picturesque sunsets, (...), a yawning lion - the pictures of East Africa are characterised by many stereotypes*] (spektrumdirekt, 11.01.2008)
- (14) Ein Mujaheddin habe sich in den Käfig verirrt und **den Löwen** gestreichelt; aber als er auch noch das Weibchen streicheln wollte, habe ihn **der Löwe** angegriffen und zerfleischt [(...) *but when he also tried to stroke the female (lion), the (male) lion attacked him and tore him to pieces*]. (Die Presse, 09.07.1998)

For *Löwe*, a total of 15 oppositional uses were found. A number of other examples (14 cases) proved to be more problematic to analyse. Most of these (12 cases) are preferentially analysed as neutral instantiations of *Löwe*. In (15), *Löwe* may either have an oppositional or a neutral interpretation; however, it would seem that *Löwe* is used without an exclusive focus on male lions. In (16), because gender is already expressed by *männlich* ‘male’ and *weiblich* ‘female’, *Löwe* (and *Tiger*) are considered to function as generic names:

- (15) Die Legende berichtet, dass er anno 107 von **Löwen** zerrissen wurde. [*According to the legend, he was torn to pieces by lions in the year 107*] (Salzburger Nachrichten, 01.02.2000)
- (16) Liger sind das Kreuzungsprodukt von männlichem **Löwen** und weiblichem Tiger. [*Ligers are a hybrid cross between a male lion and a female tiger*] (Wikipedia - URL:<http://de.wikipedia.org>: Wikipedia, 2005)

Arzt and *Student* are, similar to *Katze* and *Löwe*, frequently used with their neutral meaning (70 clearly neutral uses with *Arzt* and 69 clearly neutral uses with *Student*). However, in contrast to *Katze* and *Löwe*, the male bias in referential contexts is much stronger. This view is supported by data obtained through a survey conducted with students at Tübingen University aged between 19 and 28 years old.³⁰ In this survey, participants were first asked to interpret German nomina agentis and job titles in the masculine form in contexts of specific reference by answering the following question: “What is the gender of the referent(s) which the underlined noun refers to in the given context?” After this task was completed, subjects were invited to respond to further questions according to the answers they gave in the first assignment. Of particular interest to our discussion are the following observations:

³⁰ The participants for this survey were the same as those who performed the sentence processing task and the questionnaire concerning the acceptability of certain sentence frames (as described in § 2.2.3). The group consisted of 39 female and 21 male students. However, an in-depth discussion and statistical treatment of the results of this survey will be presented in a separate article.

- If the answer to the first question was ‘male in response to an indefinite or a definite noun³¹ in the singular (which occurred in 83,2% of all singular stimulus sentences), e.g. *Bei der Brücke zog ein/der Student eine lebensmüde Person an Land* ‘Near the bridge, a/the student pulled ashore a person who was tired of life’, then the answer to the question of whether it would be possible to use the underlined noun to refer to a female person in the given context was, for most participants, ‘certainly not possible’ (32,6%). Of the participants, 28,9% considered reference to a female person ‘hardly possible’; 29,1% found it ‘possible, but unusual’; and only 9,4% said it would be ‘certainly possible’.
- If the answer to the first question was ‘male and/or female’ in response to an indefinite or a definite noun in the singular (which occurred in 16,8% of all singular stimulus sentences), then the response to the question of whether a preference for either gender existed was ‘male’ for 77,9% of the respondents and ‘no preference’ for 22,1%.

These observations indicate that examples such as (17) and (18) may be intended in either an oppositional or a neutral way. However, for both examples, there is a strong preference for an oppositional interpretation (in the entire corpus, there were 20 examples with *Arzt* and 17 examples with *Student* for which an oppositional interpretation is strongly preferred, although a neutral interpretation is not altogether excluded), e.g.:

- (17) **Ein 23jähriger Student** wurde erschlagen in der elterlichen Wohnung aufgefunden. [*A 23-year-old student was found dead in his parents’ house*] (Nürnberger Nachrichten, 30.04.1997)
- (18) **Ein Arzt** zückte seine Pistole, als ihn nach einem Heurigenbesuch spielende Kinder in der Garage seiner Ordination in Wien ärgerten. [*A doctor pulled out his gun, when (...)*] (Salzburger Nachrichten, 13.04.2000)

An influencing factor here might be the fact that German has a productive word-formation pattern for the derivation of female terms, viz. the suffix *-in*. As pointed out by Bußmann and Hellinger (2003: 160), there seems to be a growing tendency in German towards a closer correlation between grammatical and biological gender, as a result of which masculine personal nouns are losing some of their (alleged) “generic” potential and are becoming more male-specific. With respect to the use of German *nomina agentis* and job titles in the plural, the results of the survey show a predominance of neutral interpretations:

³¹ The analysis of the results of this study shows that there is a slight difference between the interpretations of indefinite vs. definite nouns. However, due to space limitations, this particular topic will not be discussed in this article.

- If the answer to the first question was ‘male’ in response to an indefinite or definite noun in the plural (which occurred in 3,3% of all plural stimulus sentences), e.g. *Bei der Brücke zogen (die) Studenten eine lebensmüde Person an Land* ‘Near the bridge, (the) students pulled ashore a person who was tired of life’, then the answer to the question of whether it would be possible to use the underlined noun to refer to a group of only female persons in the given context was ‘certainly not possible’ for 23,5% of the participants, ‘hardly possible’ for 11,8%, ‘possible, but unusual’ for 41,2%, and ‘certainly possible’ for 23,5%. The response to the question of whether it would be possible to use the underlined noun to refer to a group consisting of both male and female persons in the given context was ‘certainly possible’ for all participants.
- If the answer to the first question was ‘male and/or female’ for an indefinite or a definite noun in the plural (which occurred in 96,7% of all plural stimulus sentences), then the response to the question of whether there would be a preference for either gender was ‘male’ for 19% of the respondents and ‘no preference’ for 81% of them.

These results show that German *nomina agentis* and job titles in the masculine form occurring in specific-referential contexts are more likely to be interpreted as neutral terms in the plural than in the singular. Apparently, the tendency reported by Bußmann and Hellinger (2003) only holds for masculine personal nouns in the singular. The corpus study confirms that in the plural, neutral uses are indeed more frequent (65 neutral plural instances with *Student* and 49 with *Arzt*). In the singular, neutral uses are particularly frequent in generic contexts (cf. 11a and 11b above).

The results of the corpus analysis of the lexical units *Student*, *Arzt*, *Löwe*, and *Katze* may be summarised as follows. Although the corpus data suggest that for all four lexical units the neutral meaning has functional precedence over the oppositional meaning (because of the higher frequency of clearly neutral uses), the degree of inherent neutrality decreases with increasing animacy (i.e. with respect to the animacy hierarchy). The lower degree of inherent neutrality results in a preference to interpret *Student* and *Arzt* as oppositional terms in referential contexts, whereas *Löwe* and *Katze* are easily interpreted as neutral in such contexts (cf. also § 2.3.3).

The higher degree of inherent neutrality of *Löwe* and *Katze* as compared to *Student* and *Arzt* is also supported by the existence of words such as *Kätzin* or *Katzenmännchen/Katzenweibchen* and *Löwenmännchen/Löwenweibchen*, a differentiation that does not exist in the case of *Student/Studentin* and *Arzt/Ärztin*. Apparently, the words *Löwe* and *Katze*, although they may potentially be understood as gender-specific terms, have a stronger tendency to be interpreted as gender-neutral terms. This finding is also corroborated by the following referential contexts in which *Löwe* (19a and 19b) and *Katze* (20) are used to refer to a female lion/female lions and a male cat, respectively.

- (19) a. **Ein kleiner weißer Löwe** ist im Hollywood- und Safaripark Schloss Holte-Stukenbrock (Nordrhein-Westfalen) vor den Augen seiner Mutter und vieler Zuschauer ertrunken [*A small white lion drowned (...) in front of his mother and many onlookers*]. Der sieben Monate alte Löwe “Snow” [...]. (Nürnberger Nachrichten, 08.04.2002)³²
- b. **Löwen** aber können in einem Jahr vier Junge haben [*Lions may have four cubs in one year*], selbst Neunlinge sind schon vorgekommen. (Kleine Zeitung, 24.08.1998)
- (20) In der letzten Woche ist in Oberneisen **eine Katze (Kater, etwa ein Jahr alt)** [*Last week, a cat (tomcat, about one year old)*] mit braun getigertem Fell zugelaufen. (Rhein-Zeitung, 07.02.2001)

Such usages (‘neutral/plus-reference’) would be highly unlikely in the case of *Student* and *Arzt*, for which the neutralisation of the gender opposition is more restricted.

2.3.1.4 Fahrzeug/Wagen ‘vehicle/car’ – Blume/Rose ‘flower/rose’

The lexical oppositions *Fahrzeug/Wagen* and *Blume/Rose* differ from the oppositions discussed previously in that they constitute asymmetrical, inclusive oppositions from both a logical and a linguistic point of view. This means that the asymmetry is not imposed by the speaker. Rather, it is intrinsic to the structure of the oppositions. Accordingly, oppositional uses are practically inconceivable for lexical units such as *Fahrzeug* and *Blume*. Both terms are by definition unspecified regarding the specific features carried by their respective sub-terms. Therefore, the application of the terms neutralisation and markedness to describe the semantic structure of this group of words, as advocated by some authors (e.g. Waugh 1975: 440-442 or Cruse 2000: 258), is not entirely satisfying. As pointed out by Dupuy-Engelhardt (1990: 29-31) and further substantiated by De Backer (2009), neutralisable pairs are characterised by the opposition between a positive and a negative value that may be neutralised in certain types of context. This should be distinguished from inherent lexical neutrality as illustrated by hypernyms such as *Fahrzeug* and *Blume*. Hypernyms are always semantically less complex than their hyponyms, and accordingly, there is no specific semantic feature opposition available that can be neutralised when a hypernym is used in certain contexts. The use of the concept of markedness to account for the differences in semantic complexity between hypernyms and their sub-terms may be justifiable. After all, semantic complexity has been regarded as one of the defining criteria of markedness by many authors following Trubetzkoy and Jakobson (e.g. Lyons 1977: 307, Coseriu 1992 [1988]: 214-216, Battistella 1990: 44-45). However, it should be noted that the theoretical utility of the notion of markedness is particularly apparent in the case of logically exclusive and linguistically inclusive oppositions: the terms of these oppositions are in principle equally complex, yet it is only

³² A Google search revealed that “Snow” was a female lion (cf. <http://www.n-tv.de/politik/Loewenmaedchen-ertrunken-article129784.html> or <http://www.spiegel.de/sptv/special/0,1518,204597,00.html>).

because they are cognised in terms of inclusion (i.e. markedness) that they do not appear as equal terms (cf. also Andersen 2001: 48). In the corpus, no oppositional uses were attested for either *Fahrzeug* or *Blume*.

2.3.2 Sentence processing task

In this section, I present the results of the sentence processing task, as indicated in § 2.2.3. This task was integrated into the questionnaire to discover which meaning of the lexical units discussed in § 2.3.1 is most frequently realised by native speakers of German when asked to make a sentence with each unit. It is hypothesised that the frequency of use reflects a conceptual hierarchy. This conceptualisation may in turn be interpreted as correlating with a linguistic hierarchy of meaning: a higher frequency of oppositional uses points to the conceptual and linguistic priority of the oppositional meaning, whereas a higher frequency of neutral uses indicates that the neutral meaning is conceptually and linguistically predominant.³³ When they finished this task, participants were additionally asked to indicate which meaning they intended for each of the sentences they made. The results of the sentence processing task are summarised in Table 2.

Table 2: Observed frequencies of the neutral and oppositional uses in the sentence processing task. Expected frequencies are in brackets

	neutral	oppositional	TOTAL
Vater	0 (30.1)	60 (29.9)	60
König	0 (30.1)	60 (29.9)	60
Mann	0 (30.1)	60 (29.9)	60
Tag	13 (30.1)	47 (29.9)	60
Student	35 (30.1)	25 (29.9)	60
Arzt	36 (30.1)	24 (29.9)	60
Löwe	46 (30.1)	14 (29.9)	60
Katze	51 (30.1)	9 (29.9)	60
Fahrzeug	60 (30.1)	0 (29.9)	60
Blume	60 (30.1)	0 (29.9)	60

A statistical analysis of Table 2 provides strong evidence for the hypothesis that the meaning that is realised in the sentences processed by the participants is associated with

³³ As with textual frequency (cf. § 2.3.1), native speakers' primary conceptualisation is considered a manifestation of system-internal lexical structure and not vice versa.

the semantic structure of the linguistic items under analysis. Pearson's chi-squared test is very significant ($\chi^2 = 369.7974$, $df = 9$, $p\text{-value} < 2.2E-16$) and Cramer's $V = 0.78$, which indicates that the association between the two variables "meaning" and "lexical unit" is strong.

A more detailed look at Table 2 informs us that with *Vater*, *König* and *Mann* only the oppositional meanings were used. This finding is in accordance with the corpus study, which also points to a priority of the oppositional meaning for each of these units. The oppositional meaning is also preferred with *Tag* (47 sentences – 78%). In 13 sentences (22%), *Tag* was used with its neutral meaning. Note that the observed frequency is also higher than expected, whereas the opposite holds for the neutral meaning. This finding contradicts the result of the corpus study, in which a higher frequency of neutral instantiations was attested with *Tag*. I take the view, however, that native speakers' intuitive (but conscious, given that it was explicitly requested) processing of sentences constitutes a more reliable indication of speakers' primary conceptualisation and of the system-internal semantic structure of the words of their language than an analysis of a random sample of corpus examples. Accordingly, based on the results of the sentence processing task, the hypothesis that, in the opposition *Tag/Nacht*, *Tag* is primarily negatively defined as to the feature carried by *Nacht* (i.e. '[no sunlight]'³⁴) seems more plausible than the hypothesis that *Tag* is primarily unspecified regarding this feature. The discussion of the results of the acceptability judgment task (§ 2.3.3) below will provide further evidence for this hypothesis.

With *Student* and *Arzt*, a higher number of neutral sentences were processed by the participants, lending further support to the conclusions drawn from the corpus study. However, the small difference between the number of neutral and oppositional sentences – 35 neutral (58%) vs. 25 oppositional (42%) in the case of *Student* and 36 neutral (60%) vs. 24 oppositional (40%) in the case of *Arzt* – is indicative of the greater tension between the neutral and oppositional meaning for lexical units such as *Student* and *Arzt* as compared to other units for which the propensity for either the oppositional (e.g. *Mann*) or the neutral meaning (e.g. *Katze*) is more clearly manifested. Note that with *Student* and *Arzt*, the discrepancy between the observed and expected frequencies is relatively small. The predominance of neutral instantiations in the case of *Löwe* and *Katze* – 46 (77%) and 51 (85%) neutral sentences, respectively – is consistent with the view expressed above that the degree of inherent neutrality is higher for lexical units that are characterised by a lower degree of animacy. Table 2 shows that the observed frequencies for *Löwe* and *Katze* are considerably higher than the expected frequencies. The subtle semantic differences in German between nouns that refer to persons and nouns that refer to animals are apparent

³⁴ A discussion of the analytic paraphrase of the semantic structure of German *Tag* and *Nacht* is found in Willems (2005: 394-398).

from the acceptability judgment task as well (§ 2.3.3). With *Fahrzeug* and *Blume*, all sentences were, as expected, semantically neutral.

2.3.3 Acceptability judgment task

In this final section, I discuss the results of the task on the acceptability of certain sentence frames. The idea is that the degree of acceptability of the use of the lexical units under investigation in these sentence frames is another indication of their internal semantic structure. In this task, participants were asked to assess the degree of acceptability on a Likert-scale, with five-point scale values ranging from ‘acceptable and natural’ (1), to ‘still acceptable’ (2), ‘awkward’ (3), ‘unnatural and hardly acceptable’ (4), and finally ‘unacceptable’ (5). An overview of the mean answer values is given in Table 3.³⁵

³⁵ The sentence frames used for this task were partly based on Haspelmath (2006: 53).

Table 3: The mean answer values of the acceptability judgment task

	Vater/Mutter	König/Königin	Mann/Frau	Tag/Nacht	Student/Studentin	Arzt/Ärztin	Löwe/Löwin	Katze/Kater	Fahrzeug/Wagen	Blume/Rose
(A) contrastive predication <u>excluded</u> : 'Das ist kein(e) x, sondern ein(e) y'	5	5	5	5	5	5	5	5	1	1
(B) use of x in specific reference to y (singular): 'Ich sah eine(n) x. Es war ein(e) y'	5	5	5	5	3	3	2	2	1	1
(C) use of x in specific reference to y (plural): 'Ich sah drei x. Es waren drei y'	5	5	5	5	3	3	2	2	1	1
(D) 'Diese(r) x ist ein(e) y'	5	5	5	5	3	3	2	2	1	1
(E) use of x in non-specific reference to y (singular): 'Ich suche/brauche eine(n) x = es kann auch ein(e) y sein'	5	5	5	5	2	2	2	1	1	1
(F) use of x in non-specific reference to y (plural): 'Ich suche/brauche drei x = es können auch drei y sein'	5	5	(2)	5	2	2	2	1	1	1
(G) 'y ist eine Art von x'	5	5	5	5	2	2	1	1	1	1
(H) 'Eine(r) von diesen x ist ein(e) y'	5	5	5	5	1	1	1	1	1	1
(I) 'Von all diesen x ist y der/die (Superl.)'	5	5	5	5	1	1	1	1	1	1
(J) use of x in non-specific reference to both x and y (singular)	5	5	(1)	1	1	1	1	1	1	1
(K) use of x in non-specific reference to both x and y (plural)	(2)	(2)	(1)	1	1	1	1	1	1	1

The general hypothesis is as follows: the “more inherently neutral” a lexical unit is, the higher the degree of acceptability of the various sentence frames in which this lexical unit occurs. Table 3 shows that for the lexical oppositions *Fahrzeug/Wagen* and *Blume/Rose*, all sentence frames were judged to be equally acceptable, which conforms with the inherent semantic neutrality of both *Fahrzeug* and *Blume*. Within the group of *Student*, *Arzt*, *Löwe*, and *Katze*, the latter term again appears as the most neutral term. The slightly different semantic behaviour of *Löwe* compared to *Katze*, which was also observed in the corpus study, can be read from the difference in acceptability with respect to the sentence frames (E) and (F). The use of *Löwe* (e.g. *I am looking for a lion*) or *Löwen* (e.g. *I am looking for three lions*) to refer to a female lion (while it could also be used for a male lion) or to a group of female lions (while it could also be used for a group of male lions) was held to be ‘still acceptable’. This finding suggests that there is a slight preference to use *Löwe/Löwen* in these contexts to refer to a male lion or male lions, respectively. The insertion of *Katze* and *Katzen* in these sentence frames, however, was considered to be entirely acceptable by the participants. The difference between personal nouns and animal

nouns, as noted in the previous sections (§ 2.3.1.3 and § 2.3.2), can be inferred from the different degree of acceptability regarding the sentence frames (B) ‘I saw a *x*. It was a *y*’, (C) ‘I saw three *x*. They were three *y*’ and (D) ‘That *x* is a *y*’. These frames are specifically designed to investigate the acceptability of plus-reference, i.e. the unmarked term’s potential to substitute for its marked counterpart with an identical reference. With *Löwe* and *Katze*, these contexts were evaluated as ‘still acceptable’, whereas they were considered ‘awkward’ with *Student* and *Arzt*.

The latter finding concurs with the view expressed above (§ 2.3.1.3) that in German, the feature of substitutability is unusual in the case of nouns that refer to persons. Looking at the sentence frames that include more generalising expressions, viz. (G) ‘*y is a kind of x*’, (H) ‘*One of these x is a y*’ and (I) ‘*Of all these x, y is the (superlative)*’ and contexts of zero-reference, viz. (J), the inclusive singular, and (K), the inclusive plural, one notices an increasing degree of acceptability with both animal and personal names. With *Tag*, most sentence frames were unacceptable except for (J) and (K). This finding confirms that the neutral use of *Tag* is limited to contexts of zero-reference. Taking into consideration the acceptability ratings for all sentence frames, it follows that the answer values of *Tag* are very similar to those of *Mann*, which suggests that *Tag* and *Mann* are similarly semantically structured concerning the hierarchy between the oppositional and the neutral meaning. However, the inherent oppositional nature of *Mann* is more pronounced. This can be seen from the fact that its acceptability in certain sentence frames is dependent on very specific contexts: the use of *Mann* to refer to female persons alone (F) or to a group of both male and female persons (K) was judged to be ‘(still) acceptable’. However, such usage would only be possible, as mentioned in § 2.3.1.2, in contexts where persons are counted, e.g. in sports or military contexts. In these contexts, *Mann* is semantically plural but morphologically singular. The use of singular *Mann* with potential reference to one female person (J) was rated as ‘acceptable’ with respect to fixed expressions such as *Mann über Bord* ‘man overboard’. In other, non-idiomatic cases, this usage is unacceptable (cf. sentence frame B). With *König* and *Vater*, only (K) was considered an acceptable sentence frame, which indicates that in German, both terms can have an inclusive sense only in plural, generic contexts (as illustrated by example 1 and 2 above, § 2.3.1.1).

2.4 Conclusions

The primary objective of this article was to clarify the difference between Jakobson’s semantic markedness model and Coseriu’s neutralisation model and to provide empirical evidence for the hypothesis that a rigid application of either of these theoretical models to

all lexical and grammatical relations is problematic. In particular, I have argued that both theoretical approaches fail to acknowledge that semantic oppositions may differ depending on how both members are opposed to each other, viz. either as the contrast between a positive member and a negative member or as the contrast between a positive member and a neutral member.

In the empirical analysis presented in § 2.3.1 to § 2.3.3, the unmarked terms of ten German lexical pairs of nouns were investigated, using three different methods: a corpus analysis, a sentence processing task, and an acceptability judgment task.

The corpus analysis revealed that the oppositional meaning is more frequent for some lexical units (*Vater*, *König*, and *Mann*), whereas the neutral meaning is more frequent for others (*Tag*, *Student*, *Arzt*, *Löwe*, *Katze*, *Fahrzeug*, and *Blume*). The sentence processing task also showed that different preferences exist for different lexical units concerning the realisation of either the oppositional or the neutral meaning, a finding that is reflected in the relationship between the observed and expected frequencies. The oppositional meaning was preferred with *Vater*, *König*, *Mann*, and *Tag*. The neutral meaning was most frequent with *Student*, *Arzt*, *Löwe*, *Katze*, *Fahrzeug*, and *Blume*. The acceptability judgment task indicated that the degree of acceptability of the various sentence frames depends on the degree of inherent neutrality of the lexical unit that is inserted in these frames. Lexical units that are more explicitly directed towards the neutral meaning generally show a higher degree of acceptability than lexical units for which the oppositional meaning is predominant. All three tests point to the same conclusion for all lexical units, with the exception of *Tag*. These conclusions can be summarised as follows:

- With *Vater*, *König*, and *Mann*, the oppositional meaning is clearly predominant with occasional neutralisation in specific types of context.
- With *Student* and *Arzt*, the various analyses indicate that both terms have more referential possibilities and are semantically more inclusive than *Vater*, *König*, and *Mann*. Note, however, that both terms have some restrictions in their actual usage: first, the use of the neutral meaning is unusual (though not entirely unacceptable) in referential contexts denoting a female person ('neutral/plus-reference'). This finding is reflected in the stronger tendency to use or interpret *Student* and *Arzt* as male terms in sentences such as (17) and (18), in which the gender of the referent may be male or female if no further specification is provided by the context. Second, the use of *Student* or *Arzt* in contexts such as ?*Sie ist Student* 'She is a student', ?*Marie, Student an der Universität Tübingen* 'Mary, student at Tübingen University', ?*Als Arzt hat sie unzähligen Menschen geholfen* 'As a doctor, she helped countless people' (where the gender of the referent is indicated by a noun or a pronoun) is of questionable acceptability. Although these findings question the inherent semantic neutrality of *Student* and *Arzt*, the general tendency obtained in this study is that neutral meanings are used more frequently (cf. corpus study and the sentence processing task) or that higher acceptability ratings are more frequent than lower

acceptability ratings (cf. the acceptability judgment task, which documents a higher degree of acceptability in sentence frames (E) to (I) with *Student* and *Arzt* than with *Mann* and *Tag*). Therefore, based on the results of the three tests, the assumption that the neutral meaning has functional precedence over the oppositional one is favoured over the assumption that the oppositional meaning has priority over the neutral one.³⁶

- With *Löwe* and *Katze*, the various tests provide strong evidence for the assumption that both terms are lexically unspecified regarding the semantic feature carried by their respective counterparts *Löwin* and *Kater*. The data also suggest that *Katze* is more often used or interpreted as a neutral term than *Löwe*, which may be ascribed to the sexual dimorphism among lions.
- *Fahrzeug* and *Blume* are hypernyms that have only one inherently unspecified *signifié*. They are therefore semantically less complex than *Löwe* and *Katze*. The latter terms potentially have a specific, oppositional meaning, which particularly occurs in contexts where the marked and unmarked term are explicitly opposed to each other.
- *Tag* constitutes a special case. This can be seen from the divergent results of the corpus analysis and the two off-line experiments. However, the data obtained through the sentence processing and acceptability judgement task, which suggest a functional priority of the oppositional meaning, are considered as more representative and reliable than the data obtained through the corpus analysis. This is especially so because the corpus mainly consisted of newspaper reports, in which the occurrence of typical neutralisation contexts of *Tag* is particularly frequent (viz. contexts of duration, temporal distance, etc.; cf. § 2.3.1.2).

To conclude this article, the schematic overview of the proposed modes of opposition presented in § 2.2.3 is repeated in Figure 4, supplemented with the ten lexical pairs that have been investigated.³⁷

³⁶ On this view, the questionable acceptability of the use of *Student* and *Arzt* in combination with a feminine/female noun or pronoun is interpreted as a syntagmatic restriction in German grammar. It is not considered as an indication that *Student* and *Arzt* primarily should be paraphrased as ‘male student’ and ‘male doctor’, respectively.

³⁷ Note that the various oppositions of groups (2) and (3) are not perfectly aligned. This is intended to represent the increasing or decreasing degree of ‘inclusiveness’.

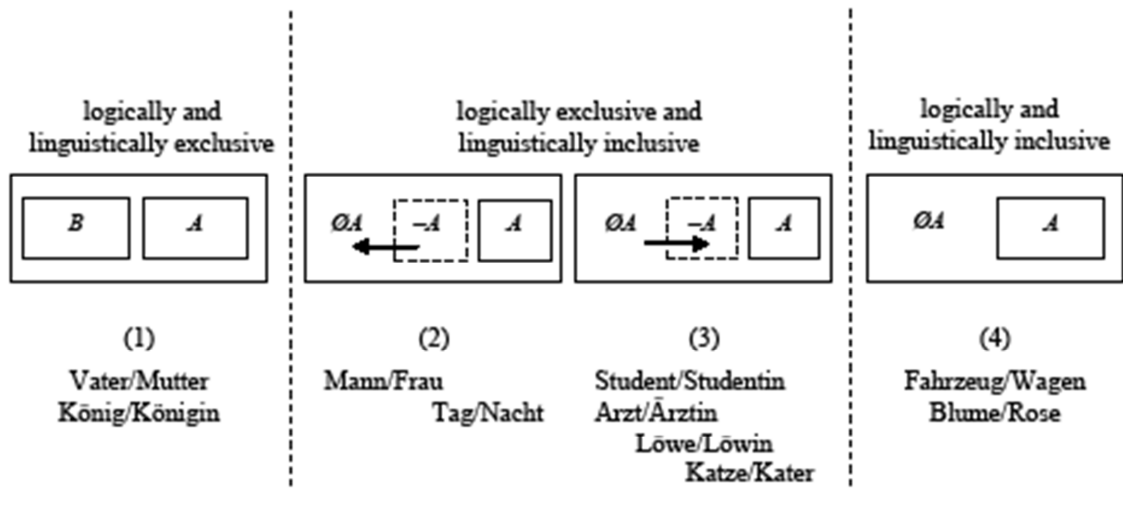


Figure 3: The various types of lexical opposition

Importantly, the revised markedness model presented in this article suggests that the concept of “unmarked” in semantics (in relation to the concept of “marked”) should not be described as a static concept (as in the theories of Jakobson and Coseriu), but rather a dynamic one, as its precise definition turns out to vary from one lexical opposition to another.

It may be fitting to conclude on a short terminological note. Insofar as the term neutralisation refers to the actual cancellation of a semantic difference in a concrete discourse context, it may be applied to lexical oppositions of groups (2) and (3) (and occasionally to oppositions that belong to the logically and linguistically exclusive mode of opposition). However, the term is superfluous in the case of logically and linguistically inclusive oppositions because in these cases, there is no meaning contrast that needs to be cancelled or neutralised in particular instances. The term neutralisability (cf. § 2.2.2) is better reserved for lexical oppositions such as *Mann/Frau* and *Tag/Nacht* to emphasise the potential of *Mann* and *Tag* to be semantically extended to function as cover terms that include their opposites. Neutralisability, then, should be clearly distinguished from what may be called (*lexical*) *neutrality* (cf. Dupuy-Engelhardt 1990, De Backer 2009). This latter term better captures the semantic relation that holds between the members of the lexical oppositions belonging to group (3).³⁸ With respect to lexical units such as *Fahrzeug* and *Blume*, the term *hypernym* is well established, and rightly so. One may also prefer this term to (*lexical*) *neutrality* to differentiate true hypernyms, which possess only one *signifié*, from lexical units such as *Katze* and *Löwe*, which have two *signifiés*. It might

³⁸ Other authors have proposed the terms *autohyponymy* and *autosuperordination* to refer to these two types of semantic relation (e.g. Cruse 2000: 110-111) without providing empirical evidence on the question as to why in the case of autohyponymy, the “general sense” is the primary, default sense, whereas in the case of autosuperordination, the “restricted sense” is primary.

be argued that the use of the term neutrality with respect to hypernyms is harmless as long as one is aware of the difference between hypernyms and units that may be used with a specific, oppositional meaning. One issue that should be placed on the agenda of linguistics is an empirical investigation of other lexical (e.g. adjectival) and grammatical oppositions to gauge the theoretical value of the proposed markedness model.

Chapter 3

Lexical neutralisation: a case study of the lexical opposition ‘day’/‘night’

This article is concerned with the adoption of the principle of neutralisation into the field of the lexicon. Its starting point is the way the concept of lexical neutralisation is defined in the writings of E. Coseriu. In the central focus are questions on the semantic status of the unmarked term of neutralisable lexical oppositions. It is argued that Coseriu’s claim that the unmarked term has two linguistic *valeurs* at the same time (specific/oppositive and neutral/generic) is problematic from a strictly structural-functional point of view because it contradicts with the postulate that language-specific meanings are homogeneous and unitary. The article explores the possibility of an alternative structural-functional approach to the semantic variation of the unmarked term that may be more consistent with this postulate. In addition, the general claim that neutralisations are always unidirectional (one of the terms of an opposition can semantically encompass another, but not vice versa) is also explored with regard to the lexicon domain. As a case study, Coseriu’s often-mentioned lexical example *Tag/Nacht* in German is analysed using historical and current corpus data. The principle of neutralisation predicts that only *Tag* can have the neutral meaning ‘24-hour period’, whereas the term *Nacht* is excluded from being used in a neutral way. First, our analysis shows that this principle might be true for present-day German but does not account for earlier stages of German and other Germanic languages (diachronic argument). Second, examples derived from a non-European language (Basketo) show that the unidirectional neutralisation relation between the lexical units for ‘day’ and ‘night’ does not hold universally (typological argument). From these empirical findings, conclusions are drawn regarding a general semantic theory of neutralisation.

3.1 Introduction

In many of his writings (e.g. Coseriu 2001 [1976]: 151, 1985: 34-35, 1992 [1988]: 225), Coseriu states that neutralisation is one of the defining features of natural language: neutralisation is not only a linguistic *universale*, but it is also typical of every level of language, from the phonological level to the textual (pragmatic) level. Additionally, Coseriu argues that accounting for neutralisation constitutes one of the four basic principles of (European) structuralism (alongside oppositionality, functionality and systematicity). Yet, despite his claim about the alleged pervasiveness of neutralisation in natural language, the notion of neutralisation as espoused by Coseriu has not been studied extensively from either theoretical or empirical perspectives.¹ This article is an attempt to fill this gap, in two ways: on the one hand, by focusing on some theoretical problems related to Coseriu's theory of neutralisation, particularly regarding the field of the lexicon (§ 3.2.2 until § 3.2.5), and on the other hand, by putting one of Coseriu's best-known examples of lexical neutralisation to an empirical test, viz. the lexical pair *Tag/Nacht* in present-day German (§ 3.3.2). The empirical analysis also includes a historical look at the lexical units 'day' and 'night' in Old- and Middle High German and Old Saxon, as well as a short case study of the lexical structure of Basketo, a genetically and typologically diverse Omotic language spoken in southwestern Ethiopia (§ 3.3.3). The theoretical portion of the study is primarily concerned with the problem of the semantic status of an unmarked term of neutralisable oppositions. The empirical portion of the study focuses on the question of whether neutralisation is always and necessarily unidirectional, as suggested by Coseriu (1992 [1988]: 214).

3.2 The principle of neutralisation

3.2.1 Theoretical preliminaries

Before giving a detailed description of neutralisation from a Coserian point of view, I will first briefly outline the basic tenets of Coseriu's semantic theory that are of particular interest to the topic of this article.

¹ See, however, Timmermann (2007) for a recent adoption of Coseriu's theory within structural-functional theory.

A first important theoretical premise concerns the distinction between the level of the language system (*langue*), the level of the norm (*norme*) and the level of discourse (*parole*). Within the framework of his structural semantics, Coseriu defines the level of discourse as the level of concretely-realised discourse-meanings, i.e. contextually or situationally determined semantic variants (Coseriu and Geckeler 1974: 146). The language system represents the functional or distinctive level of strictly language-specific meanings, i.e. *signifiés* in the Saussurean sense (Coseriu 1985, 1987, 1992 [1988]), which constitutes a system through paradigmatic oppositions. The intermediate level of the norm encompasses everything that is traditionally fixed and in common usage in a certain speech community, but is not necessarily functionally determined on the level of the *langue* (Coseriu and Geckeler 1974: 146). Coseriu's structuring into various levels of abstraction accounts for his distinction between "neutralisability" and "(actual) neutralisation" (§ 3.2.2). It will also recur in several parts of our argumentation, especially when presenting an alternative hypothesis regarding the semantic analysis of the so-called "unmarked" term of neutralisable oppositions (§ 3.2.4).

A second premise is the distinction between "signification" and "designation" (and the corresponding levels of knowledge, viz. "linguistic knowledge" vs. "extralinguistic knowledge"). Whereas the signification (*Bedeutung*, *signifié*) is the intralinguistic meaning of an element that is determined by its relationship with other elements in the language system, the designation (*Bezeichnung*, *désignation/référence*) is the relation of entire linguistic signs (*signifié* + *signifiant*) to "objects" of extralinguistic reality (Coseriu and Geckeler 1974: 147, cf. also Kabatek 2000). Importantly, this distinction is introduced as an alternative to the general view, particularly among linguists working in the cognitive paradigm (Langacker 1988; Geeraerts 1993; Taylor 1995, 2002; Cruse 2000), that linguistic items are inherently polysemous. For Coseriu, the signification corresponds to a unitary and homogeneous semantic "zone", which is understood as "a set of 'conditions' for virtual designations" (Coseriu 2000 [1990]: 29). Although Coseriu's monosemy approach to meaning is fundamental to his structural semantics, the ensuing discussion will show that the principle of neutralisation is an important challenge for the structuralist credo concerning the monosemous nature of intralinguistic meanings.

A final assumption that is relevant to the topic at issue is the distinction between "technique of discourse" (*freie Technik des Sprechens*, *technique du discours*) and "repeated discourse" (*wiederholte Rede*, *discours répété*). For Coseriu, the former notion refers to the "freely available elements and procedures of a language" (Coseriu and Geckeler 1974: 144), i.e. the words as well as the lexical and grammatical rules for their modification and combination in discourse. The latter notion "embraces everything that, in a linguistic tradition, appears only in fixed form" (Coseriu and Geckeler 1974: 147), e.g. fixed expressions, idioms and proverbs. This distinction will be especially useful in the delimitation of the empirical data (§ 3.3.1).

3.2.2 Basic properties of neutralisable oppositions

Succinctly summarising its most basic assumption, structural-functional linguistics can be said to regard language as a network of paradigmatic relations, in which linguistic items (phonemes, morphemes, words and syntactic structures) derive their functional value (Fr. *valeur* – Saussure 1968 [1916]: 251-267, cf. also Haßler 1991) from the oppositions in which they take part; this assumption holds true from both a formal and semantic point of view. From an analytical perspective, linguistic items constituting a functional opposition are characterised by a set of common features and at least one differentiating feature (Coseriu, 1992 [1988]: 201). Coseriu notes that the principle of neutralisation imposes significant restrictions with respect to the functionality of linguistic oppositions because it implies that a functional opposition that exists on the language system level (the *langue*) can be cancelled or neutralised under certain conditions on the discourse level (in the *parole*) (1992 [1988]: 212). A classic example of phonological neutralisation is “final de-voicing” in languages such as German, Dutch and Russian. In this case, the opposition between voiced and voiceless plosives and fricatives is rendered inoperable in the syllable final position, and the voiceless unit represents the so-called “archiphoneme”. As for the lexicon field, the gender oppositions – such as *padre* (‘father’) and *madre* (‘mother’) in Spanish – can be neutralised in the plural form because *padres* is sometimes used with the “archisememic” meaning of ‘parents’ (i.e. ‘father and mother’). This is further illustrated in the phrase [...] *los hijos, muchas de las veces, cuidan de sus padres liberando al Estado de esta carga* (‘[...] the children often look after their parents in order to relieve the Nation of this duty’)². For Coseriu, neutralisation involves the inclusion of one linguistic item in another, where one member stands for what is common to both members of the neutralisable opposition, thus including the other member of the opposition as well. Interestingly, Coseriu argues that neutralisations only go in one direction from a synchronic point of view, i.e. one of the opposition terms can encompass the other term, but not vice versa. In order to account for this unidirectionality, Coseriu reinterprets the relation between the members of a neutralisable opposition in terms of markedness: the marked term of the opposition is characterised by the presence of a positive feature and is therefore “für eine einzige und bestimmte Funktion gekennzeichnet [marked for one single and specific function]” (Coseriu 1976: 55). The unmarked term, on the other hand, is negatively defined as to the positive feature carried by the marked term. Consequently, it can either function as the opposite of the marked term (not-A) or as the neutral term including the marked term (not-A + A). The inclusive unidirectional relationship between

² Example taken from the CREA-corpus, “Testimonios varios, El Diario Vasco, 23/01/2004”, Digital Vasca, S.A. (San Sebastián), 2004.

the members of a neutralisable opposition is schematised as in Figure 1 (Coseriu 1992 [1988]: 218):

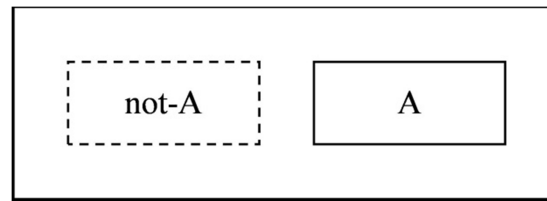


Figure 1: Neutralisation according to Coseriu

Whether the unmarked term is used oppositionally or neutrally is a matter of discourse, i.e. determined by the verbal cotext and/or situational context. The possibility of the unmarked term, however, potentially fulfilling either of these two functions is, for Coseriu, functionally motivated on the level of the language system (“neutralisability”, “Neutralisierbarkeit”):

[...] die Neutralisierung als solche ist ein »Redefaktum«, die »Neutralisierbarkeit« jedoch ein sprachliches Faktum bzw. eine Möglichkeit der Sprache, die im Sprechen realisiert wird. Deshalb betrifft die Neutralisierung als Realisierung dieser Möglichkeit die Sprache selbst. (Coseriu 1992 [1988]: 220-221)

[...] neutralisation as such is a »matter of discourse«, »neutralisability«, however, a matter of the language system, i.e. a possibility of the language being realised in speech. That is why neutralisation as a realisation of this possibility concerns the language system itself.

This means that, according to Coseriu’s theory, the marked or positive term of a neutralisable opposition (A) has only one linguistic *valeur*, whereas the unmarked or negative term (not-A) has already two *valeurs* in the language system. Coseriu writes:

[...] der markierte (»intensive«) Terminus hat nur *einen* sprachlichen Wert (A), der nicht-markierte (»extensive«) aber an sich zwei Werte: einen »oppositiven« und einen »neutralen«; er ist nämlich das Gegenteil von A, also »nicht-A« und zugleich »nicht-A + A«. (Coseriu 1992 [1988]: 218)

[...] the marked (»intensive«) term has only *one* linguistic value (A), the unmarked (»extensive«) term, however, actually has two values: an »oppositive« and a »neutral« one; that is, it is the opposite of A, i.e. »not-A« and, at the same time, »not-A + A«.

However, the “bifunctional” nature of the unmarked term constitutes a major challenge for structural semantics, particularly because it runs counter to the structuralist postulate that words are intrinsically homogeneous and unitary, i.e. they are monosemous on the level of the language-specific system or *langue*.

Before discussing the problematic semantic status of the unmarked term, it should be noted that Coseriu’s notion of neutralisation has also been used outside of the structural-

functional paradigm (e.g. Greenberg 2005 [1966]; Lehrer 1985; Andersen 1989; Battistella 1990 and 1996; Cruse 2000; Haspelmath 2005, among others), without, however, explicit reference to Coseriu. Although the different approaches consider neutralisation to be a correlate of semantic markedness, there are some considerable differences. First, for linguists such as Greenberg, neutralisation is only one aspect of a general theory of markedness, i.e. neutralisation is taken to be only *one* symptom of markedness among many others, such as syncretisation, prototypicality, simplicity, optimality and syntactic distribution. In Coseriu's account, neutralisation is defined as a principle in its own right, and it is thus incorporated into his structural-functional theory of language (next to the principles of functionality, oppositionality and systematicity). And second, for Greenberg and others, the focus is on neutralisation as a distributional phenomenon, viz. as a special type of distributional breadth in which one member of an opposition occurs to the exclusion of the other in certain contexts (e.g. in Hungarian and Turkish, only the singular form of nouns may be used with cardinal numbers, cf. Greenberg 2005 [1966]: 29). In Coseriu's theory, neutralisation is couched in inherently semantic terms, i.e. it is not the case that the context of neutralisation is defined as the position where only one of the terms can occur. Rather, the context of neutralisation is the position where the neutral *signifié* of the unmarked term is realised. This accounts for the fact that the marked member of the opposition is not prevented from usage in the same context as the unmarked term. Yet when it does, it cannot be interpreted as neutralising the opposition (e.g. *How tall is Jack?* vs. *How short is Jack?*, where the latter carries a bias towards shortness).

Moreover, the neutralisation phenomenon addressed in this article has also been discussed by other scholars under different terms. For example, Cruse (2000: 110-111) discusses the word *dog*, which has a "default general sense" in *Dog and cat owners must register their pets* and a "contextually restricted sense" in *That's not a dog, it's a bitch*, and labels this phenomenon as "autohyponymy" (cf. also Fellbaum 2000: 56, discussing the same phenomenon with respect to the English verb *to behave*, but uses the term "autotroponymy"). On the other hand, for no apparent reason, the use of *man* in reference to the human race is considered to be a case of "autosuperordination" (Cruse 2000: 111), although Cruse assumes a "contextually restricted sense" for both "autohyponymy" and "autosuperordination". As pointed out by Willems (2005: 377), Coseriu's analysis in terms of neutralisation may be a more elegant and coherent explanation for the semantic phenomena under discussion, not only because it accounts for various phenomena in a similar manner (by positing a hierarchical, inclusive relationship between marked/unmarked terms), but also because neutralisation appears to be a pervasive trait of natural language that can be encountered at various levels of language (cf. § 3.2.5).

3.2.3 The problem of the semantic status of the unmarked term

One of the basic tenets of Coseriu's semantic theory is that polysemy³ actually can be described as either homonymy or semantic variation of invariant language-specific *valeurs* in discourse. A homonymous account is explicitly rejected with respect to the semantic status of the unmarked term of neutralisable semantic oppositions (Coseriu 1995: 116-117), yet it may come as a surprise that Coseriu does not consider the alternative approach of considering one of the two "meanings" as the true homogeneous and unitary *langue*-meaning and the other meaning as a contextually determined *parole*-meaning. The question that arises, then, is whether Coseriu actually favours a polysemy approach in this case, as suggested by Timmerman (2007: 96). In our opinion, this conclusion is unwarranted. First, the term "polysemy" does not occur in Coseriu's writings on neutralisation. Second and more importantly, in dealing with the semantic variability of the unmarked term, Coseriu consistently describes oppositional and neutral meanings as linguistic values (*valeurs*, *Werte*) rather than as significations (*signifiés*, *Bedeutungen*). That is to say, for Coseriu, the two meanings of the unmarked term are not just mental concepts one associates with one and the same linguistic expression, but they are linguistically well-delimited functions resulting from a specific hierarchical inclusive relationship in the language system (i.e. they are "begründet [...] durch ein funktionelles Prinzip [motivated by a functional principle]" – Coseriu, 1992 [1988]: 220). By using the notion of *valeur*, Coseriu clearly wants to emphasise the structural motivation of these two meanings while dissociating himself from an analysis in terms of polysemy. Neutralisation then presents another case (apart from homonymy and meaning variation) against a rampant polysemy approach to meaning.

It should be noted that although Coseriu does not suggest a polysemous interpretation (with his particular terminology), some linguists have noted that many of Coseriu's writings use *valeur* and *signifié* synonymously, which is unsurprising given that *valeur* and *signifié* are, in fact, two different labels, from two different perspectives, used to describe the same linguistic phenomenon. Similar observations are made by Van Der Gucht (2005: 166-167), who then introduces the term "duosemy", defined as the existence of two (and only two) *signifiés* belonging to one single (non-homonymous) *signifiant*, viz. the unmarked term of neutralisable oppositions. To be sure, duosemy is very different from polysemy (in the traditional sense) in that the former notion refers to exactly two *signifiés* (an oppositional and a neutral one) that are structurally motivated by a specific hierarchical relationship between an intensive and an extensive term which is unique to natural language. In addition, the neutral *signifié* of the unmarked (or extensive) term is

³ "Polysemy" here as it is traditionally used in current linguistics to refer to one single linguistic form with two or more (semantically related) meanings (cf., for example, Brugman 1997: 4).

always a *signifié* that semantically incorporates the oppositional one. In contrast, polysemy refers to a set of meanings (usually more than two) that are related on the basis of some mechanism (cf. Blank's relations of polysemy such as "metaphoric polysemy", "taxonomic polysemy", "co-hyponymic polysemy" or "metonymic polysemy", Blank 2001: 105-106).

It follows that a structural-functionally oriented linguist is faced with the choice of either accepting or rejecting the specific "bifunctional" semantic nature of the unmarked term of neutralisable oppositions. Acceptance necessarily entails that neutralisation or duosemy is perceived as another exception – next to synonymy and homonymy (or homophony) – to the principle of bilaterality within structural-functional semantic theory, according to which there is a one-to-one correspondence between form and meaning (cf. also Van Der Gucht 2005: 625-626). On the other hand, rejecting the "duosemous" approach implies that the peculiar semantic status of the unmarked term must be accounted for in different terms. In the following sections, we first consider the possibility of an alternative structural-functional approach to the semantic variation of the unmarked term of neutralisable oppositions that might be more consistent with the structural-functional postulate of lexical homogeneity. Subsequently, we comment on the theoretical validity of various semantic analyses regarding the unmarked member of the lexical opposition *day/night* (and the equivalent pairs in other European languages, e.g. *Tag/Nacht* and *jour/nuit*).

3.2.4 Exploring the possibility of an alternative approach

Instead of attributing two *valeurs* or *signifiés* to the unmarked term, it might be maintained that the meaning of a linguistic item on the systematic level must be "eine und eine einheitliche, die alle Verwendungen in allen möglichen Referenzbereichen deckt und rechtfertigt [a unique and unitary one, that covers and justifies all uses in all possible contexts of reference]" (Dietrich 1997: 233). Accordingly, one may hypothesise that one of the *signifiés* of the unmarked term constitutes the unitary intralinguistic meaning, whereas the other term is a variant of this functional entity and belongs to the level of *normal language use* (henceforth: norm, cf. Coseriu 1975 [1952]). On the latter level, Coseriu (2000 [1990]: 28) comments that "a particular variant turns out to be, in certain contexts, the 'normal' variant, so that it constitutes an 'invariant' of normal language use".

Following this line of argument, one might adopt the view that the proper intralinguistic meaning of the unmarked term is the one corresponding to Coseriu's oppositional *valeur* (or *signifié*, for that matter). The neutral *valeur* could be reanalysed as a secondary derived meaning on the level of the norm. The claim that the oppositional *valeur* is the underlying semantic entity can be motivated by a concept that is the essence of neutralisation: the notion of neutralisation presupposes the notion of direct opposition

(cf. Coseriu 1992 [1988]: 201), i.e. it implies that two or more linguistic items are directly opposed to one another on the level of the language system (typically by the presence of some relevant feature vs. the absence of that feature). Consequently, from this point of view, the primary *signifié* must be oppositional and specific rather than neutral and generic in kind. What Coseriu calls the neutral *valeur* of the unmarked term may then be analysed as secondary because it is the meaning that is realised when the semantic difference between the members of a functional opposition has been cancelled.

An important corollary of this hypothesis is that the direction of neutralisation would no longer be predetermined on the level of the language system. Rather, whether a linguistic item has a neutral variant would be a matter of the norm, and since neither of the members of a functional opposition is precluded *a priori* from being used in a neutral way, it follows that neutralisation can be unidirectional as well as bidirectional (an issue that cannot be accounted for in Coseriu’s theory).

However, the outcome of the proposal to reinterpret the alleged “bifunctionality” of the unmarked term as a relationship between one systematic meaning and a particular norm usage is far-reaching: it ultimately means that one might be better to abandon notions of neutralisation and neutralisability⁴ because they would theoretically no longer add any important value. In the next section, we will further examine the theoretical soundness of this hypothesis and compare it with other approaches.

3.2.5 A concrete example: ‘day’/‘night’

In this section, we take a closer look at the lexical item ‘day’ and the corresponding items in other western European languages, for which different semantic analyses have been proposed in literature, viz. in terms of homonymy, polysemy, meaning variation and neutralisation:

- (a) *Homonymy*: Gutiérrez Ordóñez (1981: 89) argues in favour of a homonymous interpretation of Spanish *día*, stating that there are two linguistic signs with the form *día*. In his view, one sign is functional in the lexical field of words such as *noche/alba/crepúsculo*, whereas the other sign belongs to the lexical field with members such as *segundo/minuto/hora/semana/mes*. A similar interpretation has been given by Heger (1964: 509ff.) for German *Tag*.

⁴ One might, of course, also be inclined to redefine both notions and use them in a kind of “attenuated” way: since the unmarked term would no longer be analysed as being capable of having two *valeurs* or *signifiés* at the same time, a functional opposition might be considered to be neutralisable in the sense that (at least) one of its member units establishes a neutral variant on the level of the norm. Neutralisation, then, could simply refer to the fact that, in certain contexts, a “normal” semantic variant of a linguistic item occurs that is neutral as to the semantic difference that holds between the members of the functional opposition on the systematic level.

(b) *Polysemy*: Heringer (1966: 231), Hilty (1971: 253), Wunderli (1989: 117 and 1995: 797) and Koch (1998: 130) propose a polysemous approach. Regarding German *Tag*, Heringer assumes four different *signifiés* (“sememes” in Heringer’s own terminology): (1) ‘that part of a 24-hour period characterised by the presence of sunlight’, (2) ‘24-hour period’, (3) ‘(sun)light’ and (4) ‘that part of a 24-hour period during which one is awake’. Hilty and Wunderli, on the other hand, put forward five different senses (“acceptions”, “Lesarten” – also “sememes” in their terminology) for French *jour*⁵: (1) ‘the period of time during which the earth revolves one time on its axis’, (2) ‘the period of time during which the sun is above the horizon’, (3) ‘light as state/condition’, (4) ‘light as result (opening)’ and (5) ‘light as expression of life’. Koch, finally, considers the meaning ‘24-hour period’ of *jour* to be a case of “metonymic polysemy”.

(c) *Systematic meaning vs. contextual variation on the level of discourse*:

- i. Coene (2006: 38-39) claims that the systematic meaning of *Tag* is the oppositional one (*Tag* as ‘period during which there is sunlight’) and that the neutral meaning ‘24-hour period’ belongs to the level of discourse.
- ii. Hewson, on the contrary, takes the view that the intralinguistic meaning of *Tag* is the neutral one, whereas the oppositional meaning is a parole-meaning:

[T]he underlying meaning (Jakobson's *Gesamtbedeutung*) would have to be ‘the complete meaning’ from which both alloemes can be drawn, necessarily ‘*Tag* as a 24 hour cyclic period’ which also allows for an alloeme ‘opposite of night’ because the daylight hours are when we do our day’s work, while we are awake. These are the daylight hours that belong to each cyclic day, and DAY (sememe) is reduced to this only when in contrast with NIGHT. (Hewson, cited from Van Der Gucht 2005: 169, fn. 38)

(d) *Neutralisation/duosemy*: Coseriu (1992 [1988]: 215-219), Willems (2005) and Van Der Gucht (2005: 159) argue that *Tag* is the unmarked member of a *neutralisable* opposition: in the opposition *Tag/Nacht*, *Tag* can be interpreted as ‘not-night’, viz. as the *signifié* lacking the positive feature inherent to *Nacht*. By virtue of its negative characterisation, *Tag* can be the opposite of *Nacht* (*valeur/signifié 1*) or the neutral term covering a 24-hour period (*valeur/signifié 2*, ‘not-night + night’). The relation between *Tag* and *Nacht* is visualised as in Figure 2 (Willems 2005: 396):

⁵ Also a case of “polysemy” in their view, in spite of the fact that the meanings are conceived of as norm uses and not as *signifiés*.

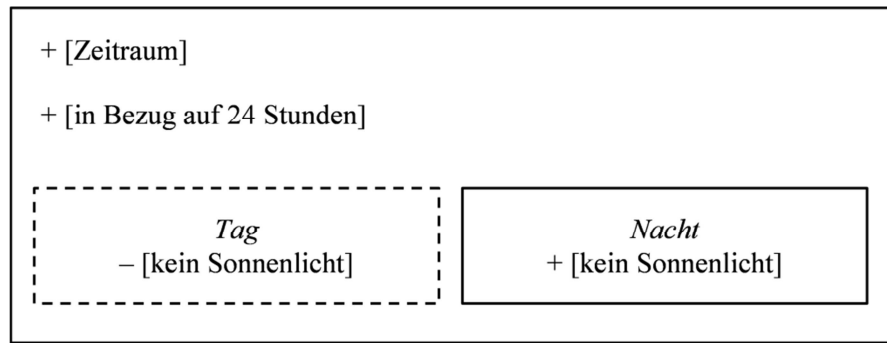


Figure 2: Lexical neutralisation (*Tag/Nacht*) according to Willems (2005)

In our view, the analyses (a) and (b) are not satisfactory from a strictly structural-functional point of view: the claims of Gutiérrez Ordóñez and Heger that two distinct lexical items accidentally bear the same form seems far-fetched and counterintuitive, particularly given the semantic proximity between both meanings. Yet, as mentioned above, an analysis in terms of polysemy is problematic as well, because the idea that *Tag* has various *signifiés* on the level of the language system is incompatible with the structuralist principle of lexical homogeneity. Dietrich (1997: 227) points out that within the framework of structural-functional semantic theory (which makes methodological distinctions between the levels of language system, norm, and discourse) the notion of polysemy as used in much of 20th-century semantics has proven to be superfluous: for structural-functional semantics, the “meanings” realised in particular instances are never intralinguistic *signifiés* as such, but are always specific variants of a single homogeneous semantic unit. For this reason, the seeming polysemy of *Tag* is actually a projection of the meaning variation of *Tag* in discourse into its systematic meaning. Along this line of reasoning, Coene’s and Hewson’s proposals (c) are more consistent with a structural-functional view on meaning. However, since these proposals do not take notice of the intermediary level of normal language use, they are not considered to be entirely appropriate either. Moreover, Hewson’s approach, which takes the neutral meaning of *Tag* (‘24-hour period’) as its systematic meaning, is unlike our view (like Coene) that considers the oppositional meaning of the unmarked term of neutralisable oppositions as its unitary *langue*-meaning.⁶ Although Hewson’s analysis is plausible as far as the lexical opposition *Tag/Nacht* is concerned (see § 3.3.2), it may be problematic within a Coserian account in terms of lexical neutralisation, viz. the “dynamic” or “active” suspension of

⁶ Hewson’s view, in fact, coincides with Jakobson’s position regarding the Russian opposition between *osël* ‘male donkey’ and *oslíca* ‘female donkey’ (Jakobson 1971 [1932]: 15). Jakobson argues that *oslíca* is more specified than *osël*, in that it bears an extra semantic element (e.g. it is specified for female sex), whereas *osël* lacks any specification for this element and hence is less specified (it is unspecified for sex and, therefore, can be used not only for male donkeys, but also for the category of donkeys in general). This implies that, in Jakobson’s account, *osël* actually never “means” (as *signifié*) ‘male donkey’ and that ‘male donkey’ is only a situationally conditioned use of *osël* ‘donkey in general’. (cf. Haspelmath 2006: 50, analysing the specific reading ‘male donkey’ as a pragmatic implicature).

semantic differences in actual discourse.⁷ In other words, given the fact that Hewson's approach conceives of the unmarked term (*Tag*) as inherently neutral on the level of the language system, it no longer needs to draw upon the principle of neutralisation to explain the particular semantic behaviour of *Tag*, thus making the notion theoretically irrelevant.

This leaves us with the analysis of Coseriu, Willems and Van Der Gucht (d) in terms of neutralisation/duosemy. As stated, this approach might still be problematic from a structural-functional theory perspective because it must accept two *valeurs/signifiés* simultaneously for one linguistic item. As a result, one might favour the alternative monosemous approach (see § 3.2.4), according to which there is only one systematic meaning for *Tag* in present-day German, viz. 'that part of a 24-hour period characterised by the presence of sunlight' (which is based on the direct opposition with *Nacht*, the systematic meaning of which can be paraphrased as 'the part of a 24-hour period characterised by the absence of sunlight'). Accordingly, the neutral meaning '24-hour period' can be taken as a semantic variant of the intralinguistic meaning of *Tag* on the level of the norm, namely as the meaning in which the opposition between *Tag* and *Nacht* is neutralised and perceived as a *pars pro toto*-meaning (the concept of the sunny part of a day standing for the entire 24-hour period)⁸.

However, the proposal to place neutralisation on the level of the norm is not unproblematic either. First, this idea might not appreciate the specific nature of the oppositions that exhibit neutralisation. Apparently, the principle of neutralisation corresponds to a specific 'linguistic logic' which is unique to natural languages and different from logic in the exact sciences. In the latter domain, an item is either 'A' or 'not-A', but never simultaneously both. In language, on the other hand, an item can sometimes be both 'A' and 'not-A + A' (Coseriu 1992 [1988]: 218-219). Moreover, neutralisation seems inherent to certain oppositions: for example, whereas the opposition between *rain/hail/snow/fog/haze* does not seem to be neutralisable, the opposition between *day/night*, *man/woman*, *old/young* or *long/short* can be neutralised. Thus it may be argued that the particular kind of lexical opposition itself generates neutralisability, and that this is a feature of the language system rather than of normal language use. Hence, the assumption that the neutral meaning of the unmarked term is *only* a matter of normal language use may be seen as a misjudgement of

⁷ In this respect, neutralisation differs from what is occasionally called *neutrality* (cf. Heringer 1968: 227 and Dupuy-Engelhardt 1990: 29-31). The latter notion refers to the ("static") phenomenon that a certain linguistic item can be, by definition, unspecified or indifferent as to a specific semantic feature (opposition). This implies that, in Hewson's analysis, the *Tag/Nacht* example should be a case of neutrality rather than neutralisation (note that neutrality is very similar to what some scholars also discuss under the term "autohyponymy", cf. § 3.2.2).

⁸ In this article, we do not want to enter into a detailed semantic analysis of the German word *Tag* and, therefore, we will not further occupy ourselves with all of the norm uses of *Tag* (or possible *ad hoc*-meanings on the level of discourse) and the relation between these meanings. Our main concern was to exemplify our view on the relation between the oppositional and neutral meaning of *Tag*.

the specific semantic nature of neutralisable oppositions. To put the neutral meaning of e.g. *day* on par with the norm meaning of items such as *fog* or *haze* arguably does not do justice to its specific semantic character. Second, the notion “norm” risks becoming too vague and too general: norm uses of linguistic items (phonemes, lexical items and syntactic constructions alike) are not functional on the level of the language system, but can become invariants of speaking (e.g. the typical phonetic realisation of a phoneme in certain dialects or the norm meaning of a compound, such as *gold medal* ‘medal made of gold’). Importantly, norm meanings tend to be closely associated with our encyclopedic knowledge of the world and belong to a contingent historical tradition. A neutral meaning in a neutralisation context, on the other hand, is a hierarchical meaning directly following from the opposition between an extensive and intensive term and, hence, must be considered virtually present in the language system. From this perspective, the historical tradition (“norm”) can only consist in the actual realisation of the systematic possibility for neutralisation (Coseriu 1975 [1952]: 59-60). And third, the fact that the principle of neutralisation seems to be operative on different levels of language in a similar way might point to neutralisation as an underlying mechanism typical of natural languages (phonology: *t/d* in syllable-final position in German and other languages; lexicon: *Tag/Nacht* in *Ich bleibe vier Tage in Paris* ‘I stay in Paris for four days’; grammar: *singular/plural* in *Der Türke belagerte Wien* ‘The Turkish people besieged Vienna’ – Coseriu 1992 [1988]: 217; pragmatic level: “foreigner talk” – Coseriu 1985: 35: a German sentence such as *Du kommen mein Haus, dort zusammen trinken* ‘you come my house, there drink together’, in the context of a German speaker talking to an immigrant, will not be qualified as incorrect since the incorrectness is considered necessary and appropriate, thus neutralising any judgments of incorrectness). Based on the above considerations, the analysis in terms of duosemy and the alternative analysis in terms of neutral norm usage come across as two plausible and justifiable accounts without giving preference to either one of them.

The following sections focus on a series of empirical analyses. In § 3.3.2, the results of an analysis of the lexical pair *Tag/Nacht* in present-day German are presented. Diachronic and typological data are discussed in § 3.3.3.

3.3 Empirical analysis

3.3.1 Methodology

The data for modern German were taken from the IDS-corpus *COSMAS II* (sub-corpus “TAGGED – Archiv der morphosyntaktisch annotierten Korpora”). For both singular and

plural *Tag* and *Nacht*, 200 examples were selected at random from the *Mannheimer Morgen* 1996, except for examples of plural *Nacht*; these were taken from the *Frankfurter Rundschau* 1999 since the entire *Mannheimer Morgen* corpus (1991 until 1996) gave only 11 occurrences of plural *Nacht*. For the analysis of examples in § 3.3.2, I will focus on the following questions:

- What are the potential contexts of neutralisation, i.e. contexts that trigger neutralisation?
- How often is *Tag* used in a neutral way? How often is it used in an oppositional way?
- Is it really the case that only *Tag* can have a neutral meaning? Or are there also contexts in which *Nacht* is neutral as to the opposition *Tag/Nacht*?

The following occurrences with the forms *Tag* and *Nacht* were excluded from the analysis:

- the homonymous forms *Tag*₂ “auf dem Bildschirm eines Computers dargestelltes sichtbares Zeichen zur Strukturierung z. B. eines Textes” and *Tag*₃ “angehängter kurzer Schlussteil bei Jazzstücken” (cf. *Duden Deutsches Universalwörterbuch* 2007: 1657)
- idiomatic expressions with *Tag* and *Nacht* such as *etwas an den Tag legen*, *zu Tage kommen*, *bei Tage besehen*, *jetzt wird's Tag*, *man soll den Tag nicht vor dem Abend loben*, *sich die Nacht um die Ohren schlagen*, *die Nacht zum Tage machen*, etc. (see Coseriu's notion of repeated discourse, § 3.2.1). Such expressions have an overall lexicalised meaning, and their constitutive components are no longer “commutable” (“kommutierbar”⁹). Consequently, the functional opposition between *Tag* and *Nacht* and the possible neutralisability of the lexical pair is irrelevant in these examples. The following syntagms with *Tag* show a high degree of idiomatisation when referring to a present, past or future period of time: *Erinnerungen aus fernen Tagen* (‘memories from a distant past’); *er hat schon bessere Tage gesehen* (‘he used to feel better’); *dieser Tage* (‘now, recently, soon’); *bis in unsere Tage* (‘until the present time’); *eines schönen Tages* (‘some time or other’); *es kommen bessere Tage* (‘times will get better’). These expressions were also left out of the analysis.

⁹ Within structuralist theory, the commutation test is used for the “delimitation of the functional level and for the analysis of lexemes into distinctive features” (Coseriu and Geckeler 1974: 128). The procedure is based on the question whether the replacement of one element for another on one level of language (form or content) entails a change on the other level of language (content or form). If so, a functional boundary has been transgressed. The elements constituting an idiomatic expression, however, are no longer exchangeable (“commutable”), and, hence, there are no oppositions possible between them (note that as *complex entities* with a global meaning of their own such expressions are commutable as well).

In § 3.3.3., I argue that the opposition between the lexical units for 'day' and 'night' can sometimes be neutralised in two directions. This is unlike Coseriu's theory of neutralisation, which forecloses this possibility. Our claim is substantiated by data from earlier stages of German and other Germanic languages (Old- and Middle High German and Old Saxon in particular) and by data from a non-European language (Basketo, an Ethiopian language). The data for Old High German and Old Saxon were collected from the text database of the *Thesaurus Indogermanischer Text- und Sprachmaterialien* of the University of Frankfurt (<http://titus.uni-frankfurt.de/indexe.htm>). The Middle High German data were taken from the *Mittelhochdeutsche Begriffsdatenbank* (MHDBDB – <http://mhdbdb.sbg.ac.at:8000/>). The Basketo data were kindly and generously provided by Dr. Yvonne Treis (Research Center for Linguistic Typology, La Trobe University, Australia).

3.3.2 A synchronic analysis of *Tag* and *Nacht* in German

On the basis of the corpus data, it can be argued that *Tag* is frequently used with the neutral meaning '24-hour period'. This neutral variant generally appears in the following contexts (contexts of neutralisation):

(a) *Contexts in which Tag specifies the duration of a certain process, activity or event*

Plural:

- (1) Es wird wohl nur noch **Tage** dauern [it will probably only take a few more days], dann dürfte der Hoechst-Konzern der Dritte im Chemie-Bunde sein. (M96TG/601.00962 Mannheimer Morgen, 09.01.1996, Wirtschaft; Kommentar)

Contexts dealing with the duration of negotiations, political debates or discussions are of particular interest. In these contexts, *Tag* is used in a neutral way in order to indicate the total amount of time spent on discussions without specifying the exact time at which the discussions took place.

- (2) Bei einer Fachtagung unter dem Motto "Das Fahrrad im Umweltverbund" **diskutieren drei Tage lang** Verkehrsplaner und Kommunalpolitiker aus dem In- und Ausland [traffic planners and local politicians are discussing for three days]. (M96/605.19559 Mannheimer Morgen, 06.05.1996; In der Rikscha zu Radl-Tagen)

The discussions in (2) might have lasted three days in total, but discussions may have taken place at different times during this period (e.g. only during the morning of the first day, during the whole afternoon on the second day and from eleven o' clock in the evening until two o' clock at night on the third day). The crucial thing is that *Tag* does not

limit the duration of the debates to the sunny part of a 24-hour period. Therefore, *Tag* must be understood as “Tag + Nacht”¹⁰.

The use of *Tag* to express duration is particularly frequent in its plural form. As for the singular, only a few contexts were found in which *Tag* could be analysed as referring to a 24-hour period in duration:

Singular:

- (3) Vorsichtshalber dürfen die etwa 900 Kinder und Schüler an diesem Morgen sogar zu Hause bleiben. Die Stadt Frankfurt hat Kindergärten und Schulen für einen **Tag** dichtgemacht [the city of Frankfurt has closed down nursery schools and primary and secondary schools for one day]. (M96TG/601.04587 Mannheimer Morgen, 30.01.1996, Politik; Pikantes aus der Hoechst-Chemieküche)

However, an interpretation in terms of 24 hours does not seem compelling even in example (3), when *Tag*, for instance, is considered to refer only to the daylight hours of a normal working day or school day. The low frequency of singular *Tag* used to refer to a 24-hour duration is indicative of the fact that this is usually done with paraphrases such as *24 Stunden* or *einen Tag und eine Nacht* in order to avoid ambiguity.

- (4) Heimlich, die Köpfe hinter hochgeschlagenen Kragen versteckt, verließen gestern vier junge Männer das Gebäude der Polizei in Lübeck. **24 Stunden** hatten sie unter dem furchtbaren Verdacht gestanden [for 24 hours, they had been under suspicion] den verheerenden Brand im Asylbewerberheim entfacht zu haben. (M96TG/601.02989 Mannheimer Morgen, 20.01.1996, Politik; Vier kleine Ganoven im Glück)

- (b) *Contexts in which Tag indicates the temporal distance between two points in time: in this case, the temporal expressions have a more or less fixed constructional pattern, viz. x Tage(e) vor/zuvor/früher/eher/bevor ‘x day(s) before/earlier’, x Tag(e) nach/später/nachdem ‘x day(s) after/later’, vor x Tag(en) ‘x day(s) ago’ or nach x Tag(en) ‘after x day(s)’.*

Plural:

- (5) Anfang November schickte Clinton erstmals Beamte aus Geldmangel nach Hause. **Nach drei Tagen** war der Blackout der Regierung beendet [after three days the blackout of the government had come to an end]. (M96TG/601.00607 Mannheimer Morgen, 05.01.1996, Politik; Boxkampf geht in die nächste Runde)

¹⁰ The following example from the *Franfurter Rundschau* of February 1999 bears out this hypothesis: “**Drei Tage lang (vor allem aber in den Nächten)** [for three days (particularly, however, during the nights)] debattierte das zunehmend rarer werdende Publikum mit Prominenten.” (R99/FEB.16287 *Franfurter Rundschau*, 27.02.1999, S. 9, Ressort: AUDIOVISIONEN; 1000 Plateaux und eine Transmediale - Berlin fragt nach den Neuen Medien)

Singular:

- (6) **Einen Tag vor** seinem Freitod hatte Nishimura noch erklärt [One day before his suicide, Nishimura declared that], durch die Konfusion nach dem Unfall und die Zeit seither könnten sich viele Beteiligte nicht mehr genau erinnern, was eigentlich passiert sei. (M96TG/601.02033 Mannheimer Morgen, 16.01.1996, Politik; Rätselhafter Freitod eines Managers)

In neutralising contexts (a) and (b), *Tag* can be interpreted as a cyclic unit of 24 hours indicating a length of time: *einen Tag später*, for example, means '24 hours later', *drei Tage lang diskutieren* means 'to discuss during three periods of 24 hours'. The cyclic nature of *Tag* is less prominent in these neutralisation contexts. In most cases, *Tag* can be analysed as a calendrical unit, i.e. a temporal unit in the (Gregorian) calendar stretching from midnight to midnight.

- (c) *Contexts in which Tag simply refers to a time span of 24 hours (during which something takes place/took place/will take place). This type of neutralisation context is subdivided into two groups, based on whether Tag is implicitly or explicitly part of another calendar unit (week, month or year).*

- (c₁) *Tag* as part of a prepositional phrase introduced by *an*, *in*, *während* or *innerhalb* (*von*). In the examples under (c₁), *Tag* is implicitly part of another calendar unit.

Plural:

- (7) Munteres Treiben herrscht **an diesen kalten Tagen** im Eisstadion an der Saarlandstraße [There was a lot of activity during these cold days in the ice stadium in the Saarlandstreet]. (M96TG/601.03717 Mannheimer Morgen, 25.01.1996, Lokales; Lieber ins Eisstadion als auf gefährliche Weiher)

Singular:

- (8) "Von dem Vorfall hat keiner etwas mitbekommen", wundern sie sich **am Tag nach der Entführung** [they are wondering on the day after the abduction]. (M96TG/601.00093 Mannheimer Morgen, 02.01.1996, Lokales; "War alles belebt draußen")

Contexts in which *Tag* is combined with lexical items such as *heutig* 'present-day', *jetzig* 'current', *gegenwärtig* 'present', *nächst* 'next', *kommend* 'coming, next', *folgend* 'following', *vergangen* 'past', and *letzt* 'last' focus similarly on present, future or past events.

Plural:

- (9) Wie die Nachrichtenagentur Interfax unter Berufung auf das tschetschenische Innenministerium meldete, wurden **in den vergangenen zwei Tagen** an mehreren Plätzen in Grosny Sprengsätze in Koffern gefunden [during the past two days several explosive charges were found in bags in several places in Grosny]. (M96TG/601.00282 Mannheimer Morgen, 03.01.1996, Politik; Tschetschenen fliehen)
- (10) Das Programm soll **in den kommenden Tagen** fertiggestellt werden [the programme is to be completed during the next few days]. (M96TG/601.03681 Mannheimer Morgen, 24.01.1996, Politik; Kanzlerrunde bemüht um...)

Singular:

- (11) **Am nächsten Tag** will Herr D. das Geld für seinen neuen Fernseher bereitlegen [On the next day, Mr. D. wants to lay out the money for his new television]. (M96TG/601.00850 Mannheimer Morgen, 10.01.1996, Lokales; "Die finden jedes Geldversteck")

Also belonging to this group is the use of *Tag* denoting a stretch of time (of 24 hours) during which something notable, important, bad, or funny happens/happened/will happen, such as a special day, holiday, day to remember or historic day.

Plural:

- (12) (Wegen des großen Andrangs müssen die Kinder in der Gesamtschule bereits vom 12. bis 16. Februar angemeldet werden, bei den übrigen Schulen Anfang März. Alle Einrichtungen organisieren zuvor **Tage der offenen Tür** [before, all institutions organise open days]. (M96TG/601.04184 Mannheimer Morgen, 27.01.1996, Lokales; Welche Schule ist geeignet?)

Singular:

- (13) Dann muß er sich allerdings bis zum **Tag der Deutschen Einheit** gedulden [then, he will have to wait until the German Unity Day], um mit einem Tag Urlaub einen vier-tägigen Kurztrip unternehmen zu können. (M96TG/601.00167 Mannheimer Morgen, 02.01.1996, Unterhaltung; 1996: Viele "Brückentage"-ideal für Kurzurlauber)
- (c₂) *Tag* as a day that is explicitly part of another calendar unit (week, month or year) or a conference, meeting, trial, office term, and so on.

Plural:

- (14) Es ist schon bemerkenswert, wie Oskar Lafontaine **seine ersten hundert Tage an der Spitze der SPD** [his first hundred days at the head of the SPD] zum Anlaß nimmt, für

Spekulationen zu sorgen. (M96TG/602.08672 Mannheimer Morgen, 23.02.1996, Politik; Lafontaines Taktik)

Singular:

- (15) Nach Angaben von Læssøe wird Kopenhagens normales kulturelles Angebot vom **ersten Tag des neuen Jahres** an bis zum Jahreswechsel 1996/97 [from the first day of the new year until the turn of the year 1996/97] um 20 Prozent ausgeweitet. (M96TG/601.00152 Mannheimer Morgen, 03.01.1996, Feuilleton; Absage ans Spektakel)

Particularly in the singular, *Tag* is then often co-referential with a certain calendar day that is explicitly named in the verbal cotext:

- (16) Trotz des tobenden Krieges ist der **6. August 1945** zunächst **ein normaler Tag** in der japanischen Stadt Hiroschima [In spite of the raging war, the 6th of August 1945 is a normal day in the Japanese town Hiroshima]. (M96TG/601.00292 Mannheimer Morgen, 04.01.1996, Unterhaltung; Im Angebot)

As mentioned, *Tag* is considered a calendrical unit in the examples under (c). As such, *Tag* comprises both day and night and thus neutralises the opposition between *Tag* and *Nacht*. As in example (2) above the temporal expressions with *Tag* do not specify when events during one or more 24-hour periods are to be situated; rather, they only define the period of time within which the event is to be situated and leave open the possibility for the event to take place any time within that time span.

(d) *Contexts with a frequentative determination: the corpus data suggest that the following two types of contexts must be distinguished:*

- (d₁) contexts in which *Tag* indicates the *frequency* of a certain process, activity or event: in these contexts, *Tag* is neutral as to the opposition *Tag/Nacht* because it is used as a temporal unit that is part of a cycle represented by a week (which in itself consists of a predetermined number of 24-hour periods, i.e. seven calendrical days)

Plural:

- (17) Fred Thieler besteht aber darauf, mindestens noch **zwei Tage in der Woche** im Atelier zu arbeiten [Fred Thieler insists on working at least two days per week in the studio]. (M96TG/603.12285 Mannheimer Morgen, 15.03.1996, Feuilleton; Maler Fred Thieler wird achtzig)

Singular:

- (18) Was sich sonst **jeden Tag** um halb sieben wiederholte [what repeated itself otherwise every day at half past six], hatte nun also eine ganz besondere Bedeutung. (M96TG/601.00001 Mannheimer Morgen, 02.01.1996, Lokales; Hertie schloß für immer die Türen)

- (d₂) contexts in which a *frequency, duration or quantity* is expressed and *measured by one day or several days*. *Tag* is understood as a calendrical unit that includes a day and a night.

Plural:

No examples of this type of neutralisation context were found in the corpus.

Singular:

- (19) Arafats Lebensstil aber hat sich kaum verändert. Er arbeitet **sechzehn Stunden am Tag**. Am produktivsten zwischen neun Uhr abends und Mitternacht [He works sixteen hours a day; most productively between nine o'clock in the evening and midnight]. (M96TG/601.03155 Mannheimer Morgen, 22.01.1996, Politik; Das Stehaufmännchen im Nahen Osten)

In Table 3 below, the frequency of the various potential contexts of neutralisation for both singular and plural *Tag* is specified:

Table 3: Frequency of occurrence of neutral uses of singular and plural *Tag* in German

Contexts of neutralisation		Frequency (out of 200)	
		Singular	Plural
duration		5	45
temporal distance		28	74
time span (during which something happens)	Implicit part of another calendar unit	57	70
	Explicit part of another calendar unit or part of a conference, a trial, term of office, etc.	38	4
frequentative determination	<i>Tag</i> is the unit indicating the frequency	19	4
	frequency, duration or quantity is measured by <i>Tag</i>	15	/

It follows that in the plural form, the opposition *Tag/Nacht* is often neutralised in contexts where *Tag* is a cyclic unit of 24 hours, i.e. in contexts expressing duration and temporal distance. This is not surprising since people nowadays usually reckon time in cycles of 24 hours, or days, when determining duration or temporal distance (that is, people think of days as measuring units). Alongside these contexts, the neutral meaning of *Tag* in the plural form is also frequent in contexts where *Tag* refers to a 24-hour time span that is implicitly part of a calendar unit represented by a week, month or year. Such reference is often done by means of expressions such as *in den kommenden Tagen* 'in the next (few) days', *in den vergangenen Tagen* 'in the past (few) days' or *die nächsten Tage* 'the next (few) days'. In the singular, neutralisation in contexts expressing duration is much less frequent than in the plural. This is because temporal fixations such as *einen Tag lang* 'one day long' can often be ambiguously interpreted as either 'a duration of approximately eight hours' (*Tag* as 'daytime period') or as 'a duration of 24 hours'. On the other hand, the neutral meaning frequently occurs in contexts where *Tag* can be clearly analysed as a calendrical unit of 24 hours, either as a part of syntagms (such as *am nächsten Tag* 'on the next day', *der vorige Tag* 'last day', *am heutigen Tag* 'today, this day') or in co-reference with a date explicitly named in the co-text ([...] *am 27. Januar. An diesem Tag* [...]) '[...] on 27th of January. On this day [...]']).

It should be noted that almost all of the above examples carry some uncertainty as to whether the temporal expressions of *Tag* are to be understood as a reference to either "exactly x period(s) of 24 hours" or as "roughly x period(s) of 24 hours". Although the latter interpretation might often be more probable, it is important to note that this difference is a matter of discourse; in other words, the fact that utterances such as *drei Tage lang diskutieren* 'to discuss for three days' or *nach drei Tagen* 'after three days' may very well refer to 'roughly three periods of 24 hours' does not concern the neutralisable lexical opposition *Tag/Nacht* as such, but rather concerns the reference of 'three days' to extralinguistic reality (i.e. the designation or *Bezeichnung*). From a Coserian point of view, the semantic "flexibility" (Taylor 2002: 98) of *Tag* in discourse is possible precisely because the neutral *signifié* of *Tag* is functionally delimited as "Tag + Nacht" (i.e. day including a night) and because the speaker knows that *Tag* is the extensive term of the opposition, possessing two *signifiés* (or *valeurs*) at the same time, viz. an oppositional and a neutral one.

Regarding the distribution of the oppositional and neutral uses of *Tag* in the corpus, Table 4 shows that neutral uses are clearly much more frequent than oppositional uses, both in the singular and in the plural:

Table 4: The frequency of the oppositional vs. neutral uses of *Tag* in German

	Oppositional (intensive)	Neutral (extensive)
Singular	38	162
Plural	3	197

An important but difficult question concerns the implications that our frequency observations have on determinations of which meaning of the lexical unit *Tag* is the basic *langue*-meaning. On the one hand, it can be argued that the unambiguously higher frequency of neutral uses is due to the intrinsic “wider” meaning of *Tag*, and thus the neutral meaning of *Tag* should be considered the primary meaning on the level of the language system after all (as Hewson claims). As already stated in § 3.2.4, this conclusion would make the notion of neutralisation theoretically superfluous, at least as far as the lexical pair *Tag/Nacht* is concerned. Moreover, this claim is consistent with the important role given to frequency in many areas of current linguistic debate (cf. Croft 2003, Haspelmath 2006). On the other hand, one might argue that the statistically most frequent meaning should not be identified with the systematic *langue*-meaning (cf. Jakobson 1971 [1932]: 4), so that frequency is only a property of discourse. As such, the frequency observation only tells us something about the way in which speakers make use of the functional oppositions at their disposal, and does not reveal much about the system of oppositions itself. From the latter perspective, the oppositional meaning of *Tag* is still the basic intralinguistic meaning.

Having defined the main contexts of neutralisation for *Tag*, we will now consider the question of whether *Nacht* can also be used in a neutral way. The following are two examples from the corpus in which *Nacht* might qualify for an analysis in terms of 24 hours¹¹:

- (20) Sie verzeichnet nach eigenen Angaben bisher etwa 14 000 Übernachtungen jährlich; für das Jahr 2000 werden 22 000 erwartet. Die durchschnittliche Verweildauer liegt bei zwei bis drei **Nächten** [The average length of stay is two to three nights]. (R99/OKT.83044 Frankfurter Rundschau, 14.10.1999, S. 26, Ressort: WIRTSCHAFTSSPIEGEL; Erweiterung des "Collegium Glashütten" eröffnet)
- (21) Touristen, die schnorcheln wollen, können zum Beispiel drei **Nächte** in Aqaba (Jordanien) verbringen [Tourists, who want to go snorkeling can stay, for example, three nights in Aqaba (Jordan)]. (R99/MAR.20262 Frankfurter Rundschau, 13.03.1999, S. 10, Ressort: REISE; Touristische Kooperation im Heiligen Land)

¹¹ Note that in all of the examples *Nacht* is in the plural. In the singular, *Nacht* always unmistakably refers to the dark part of a 24-hour period.

However, following Willems (2005: 382-384), we argue that the semantic scope of *Nacht* in contexts such as (20) – (21) is still restricted to the dark part between sunset and sunrise. First, both examples belong to the tourist sector, where nights normally refer to periods without sunlight during which one sleeps in a hotel. The specific semantic scope of *Nacht* in an utterance such as *drei Nächte in Aqaba verbringen* becomes clear when compared to the corresponding utterance with *Tag*: *drei Tage in Aqaba verbringen*, which is obviously a statement about three periods of roughly 24 hours in Aqaba. On the other hand, *drei Nächte in Aqaba verbringen* only concerns periods without sunlight in Aqaba and is therefore semantically equivalent to *spend three nights (to sleep) in Aqaba*. And second, *drei Nächte in Aqaba verbringen* does not necessarily imply that one is also present during the days in between the nights, since one can also visit another city during the day. In other words, the information about daytime activities is referentially determined, rather than semantically: it is based on our knowledge of the (extralinguistic) world but is not encoded in the temporal expression with *Nacht*.

The same conclusion holds for the following examples with *Nacht*:

- (22) Nur in einer Seitenstraße ist noch etwas Leben. **Vor drei Nächten**, sagt eine Frau, die vorsichtig aus einem Haustor hervorschaut, habe die Polizei Albaner mit Bussen abtransportiert [three nights ago, (...), the police took away Albanians with buses]. Die Männer würden gebraucht, um Gräben auszuheben, wurde den Familien beschieden. (R99/APR.30543 Frankfurter Rundschau, 17.04.1999, S. 3, Ressort: DIE SEITE 3; Was Journalisten in Kosovo am Ort des Angriffs auf einen Flüchtlingsstreck zu sehen bekamen - und was nicht)
- (23) **Zwei Nächte zuvor** waren bereits neun Männer aus der Unterkunft geflohen [Two nights earlier, already nine men had escaped from the accommodation]. Aus dieser Gruppe wurde vom BGS ein Afghane geschnappt. (R99/FEB.08145 Frankfurter Rundschau, 01.02.1999, S. 13, Ressort: FRANKFURTER STADT-RUNDSCHAU; Asylsuchende entflohen aus Flüchtlingsunterkunft)

It is clear that *vor drei Nächten* 'three nights ago' and *zwei Nächte zuvor* 'two nights earlier' are describing nightly activities, i.e. they only say something about what happened during a particular night which is situated 'x nights' before the present (and the focus remains on the nights alone, contrary to corresponding expressions with *Tag* that allow reference to the entire 24-hour period).

This means that, as far as present-day German is concerned, the data seem to confirm Coseriu's prediction that the opposition between the lexical units for 'day' and night' is neutralisable in only one direction: in German, *Tag* can be used with a neutral meaning, but *Nacht* cannot be used neutrally. Importantly, in the examples with *Nacht*, the verbal context always makes it clear that a restrictive reading (*Nacht* as the dark part of a 24-hour period) is relevant and meaningful. However, this conclusion cannot be generalised because it does not hold for earlier stages of German, other Germanic languages or some non-European languages. This will be discussed and exemplified in the following section.

3.3.3 The lexical units for ‘day’ and ‘night’ from a diachronic and typological perspective: arguments against the unidirectionality of neutralisation

3.3.3.1 Diachronic argument

In this section, Coseriu’s claim that neutralisation is always unidirectional is questioned using data from Old- and Middle High German and Old Saxon.¹² On the basis of an onomasiological analysis of the concepts of ‘day’ and ‘night’, it is argued that both terms denoting the concept of ‘day’ and ‘night’ can be used for a 24-hour period (as noted by Willems 2005: 425).¹³ Importantly, the contexts in which the latter term is used does not necessarily limit the semantic scope of ‘night’ to the dark part of a 24-hour period, so that such an interpretation is not semantically or pragmatically compelling (or is sometimes not even relevant). In this respect, the use of the term for ‘night’ in old Germanic languages appears different from its use in present-day Germanic languages. An analysis of the corpora shows that neutral uses of ‘night’ were very common in the following contexts (contexts of neutralisation):

- (a) *Contexts expressing a duration, particularly in the following contexts: ‘to be away from home for x nights’, ‘to be abroad for x nights’, ‘to ride for x nights’ or ‘to be/stay/remain/wait/sit/lay/dwell/abide somewhere for x nights’. This ‘somewhere’ can be specified as ‘in the hills’, ‘on an island’, ‘in a certain town/village/fortress/mark’, ‘(on a ship) at sea’, ‘in the mountains’, ‘at a feast’, ‘with a friend’, ‘in a berth’ or ‘in a cave’.*

Old High German:

- (24) **feorzuc nahto** uuarte he e tages getanes, daz he ni protes ni lides ni neouuihtes, des e tages gitan si, ni des uuazares nenpize, des man des tages gisohe, ni in demo niduuahē ni in demo nipado, ni cullantres niinpiize ni des eies, des in demo tage gilegit si, [...] (Minor Old High German Monuments, (Baseler) Fuldaer Rezepte gegen Fieber)

¹² I would like to thank Luc De Grauwe for helping me translate the Old Saxon and Old- and Middle High German data. It should also be noted that the examples given in this section are only a selection from all of the examples attested in the corpora.

¹³ See also, for example, Lexer *Mittelhochdeutsches Handwörterbuch* (1974: 22): “bei fristbestimmungen wurde nach nächten gerechnet” or Jacob and Wilhelm Grimm *Deutsches Wörterbuch* (online available on <http://germazope.uni-trier.de/Projects/DWB>): “fristbestimmungen wurden früher nach nächten, nicht nach tagen gerechnet (*nec dierum numerum, ut nos, sed noctium computant. Germ. 11*)”. Also *Reallexikon der germanischen Altertumskunde* (2005: 268): “Bei den Idg. und Germ. wurde der Nacht ‚Zeitspanne zw. Sonnenuntergang und Sonnenaufgang‘ der Vorzug gegenüber den hellen Tag gegeben, weil in den Nächten die Beobachtung des Mondes und dadurch die Berechnungen des Mondjahres möglich sind”.

'For forty nights he must mind, before the day is done, not to take bread, nor wine, nor something else, before the day would be done, nor water (as food), one fetches during the day; he also should not take a bath, nor eat coriander or an egg, that was lain during the day, [...].'

Middle High German:

- (25) Alsus fuorens **über sê volle vierzehen naht**, daz sie nie keiner slaht âne wazzer sâhen. (Flore und Blanscheflur, 3318 – 3321)

'So they sailed **on the sea for fourteen nights**, during which they saw nothing but water.'

- (26) "Wolt ir also schier enweg?" sprach der konig; "des ensolt ir nit thun, **ir solt mit der koniginn acht tag beliben oder vierczehen nacht**." (Prosa-Lancelot part 1, page 258, 24 – 26)

"Do you want to leave straightaway?", the king asked; "you should not do that, **you should stay with the queen for eight days or fourteen nights**."

(b) Contexts referring to a time span of 24 hours (during which something happens):

Old High German and Old Saxon:

No examples of this type of neutralisation context were found in the corpus.

Middle High German:

- (27) Er sprach zuo sînem herren:" wir suln daz wol bewarn, daz wir si lâzen rîten ê daz wir selbe varn dar nâch **in siben nahten** in Etzelen lant. (Nibelungenlied B/C, stanza 1480, 1 – 3)

'He said to his lord: "We will bear in mind that we let them ride before we ride ourselves **within seven nights** to the land of Etzel."' (also possible 'in seven nights' – temporal distance)

(c) Contexts in which a temporal distance is indicated

Old Saxon:

- (28) Giuuêt imu thô that barn godes innan Bethania **sehs [nahtun êr]**, than thiu samnunga thar an Hierusalem. (Heliand, LI, 4198 – 4200)

'The child of God went to Bethania **six nights earlier** than the gathering there in Jerusalem.'

Middle High German:

- (29) Nû lancte die hôchzît der wirt **vierzehen naht sît**. (Erec, 2214 – 2215)
‘Now the landlord longed for the feast (which was to take place) **fourteen nights later**.’

From the following examples, it is clear that the term for ‘day’ could also mean ‘24-hour period’. Due to space limitations, we do not consider whether potential neutralisation contexts for ‘day’ were different from those for ‘night’ in the past. What interests us is the fact that the opposition could be neutralised in two directions.

Old High German

- (30) Inti **after sehs tagun** nam Petrum inti Iacobum inti Iohannem sinan bruoder inti leita sie in hoan berg suntringon, thaz her betoti. (Tatian, Gospel Harmony, chapter 91, 1)
‘**And after six days** he took Peter and Jacob and his brother John with him and brought just them to a high mountain to pray.’

Middle High German

- (31) dô fôre wir rehte **drî tage** unde quâmen in ein lant, daz was Brasiacus genant. (Lamprechts Alexander, 5474 – 5476)
‘Then we rode **for three days** and arrived at a country that was named Brasiacus.
- (32) im kûndet sô des boten sage daz er **an dem naehsten tage** an dem lîbe solde sterben. (Alexander, U.v.E., 11715 – 11717)
‘It was told to him that he would die **on the next day**’

3.3.3.2 Typological argument

Not only in earlier phases of the Germanic languages, but also in various contemporary non-European languages the use of the word that normally denotes the night to refer to a 24-hour period is not unusual. One such language is Basketo, an Omotic language (Afro-Asiatic phylum) from Ethiopia. In this language, *k'ámm* ‘night’ is in opposition to *galáss* ‘day(time)’ (in the sense of ‘time when there is daylight’). Interestingly, both lexical items can be used with the neutral meaning ‘24-hour period’, which means that the opposition can be neutralised in two directions.

3.3.3.2.1 *k’ámm*

a. ‘12 hours, darkness’

(33) [Duu2008sep06a]

béers-í k’ámm béntt-íir-e
 star-NOM¹⁴ night shine-M.IPV-DEC
 ‘Stars shine in the night.’

The following example illustrates the contrast between *galáss* ‘time of light’ vs. *k’ámm* ‘time of darkness’:

(34) [441-Story_DUU_Bat: 0 Title]

φádd’i ábáb galáss-galáss súrkk’-í φééshk-ár
 bat-NOM why day-day sleep-CONV1 pass_the_day(12h)-CONV2
k’ámm-k’ámm φar-íir-áà?
 night-night fly-M.IPV-INTERROG
 ‘Why does the bat spend the days sleeping and why does it fly [around] in the nights?’

b. *k’ámm* ‘24 hours’

The use of *k’ámm* in the sense of ‘24-hour period’ is illustrated, for instance, in the next excerpt from a narrative. Three successive sentences are given in which the speaker uses *k’ámm*:

(35) [62-Story_KAD_Lion Monkey Shoes: 17]

[...] **aw-í=garta gadd-í=géyn hayddz-í k’ámm káll-í=géyndo**
 sun-TV=INSIDE put-CONV1=COND three-TV night dry-CONV1=COND
yíntí tóh-in=bar té lakka?ár ts’aaz-ár yíntáb sikk-áár-e,
 2PL foot-F.DEF=ICP 1SG measure-CONV2 cut-CONV2 2SG.DAT sew-F.IPV-DEC
waatts-í=garti mish-ára”
 water-TV=INSIDE put-CONV2
 ‘[Monkey:] “[...] when I have put it into the sun [and] when it has dried a little for three days [lit. “nights”], I will measure your foot, cut [the leather] and sew [shoes] for you; when I have put [the skin] into water [to soften it].”’

¹⁴ For an overview of the abbreviations used in the interlinearisation, see the list of abbreviations at the end of the article.

[62-Story_KAD_Lion Monkey Shoes: 18]

“eróó, **hayddzí** **k’ámm-áà?** **isshi.**”

o.k. three-TV night-INTERROG o.k.

‘[Lion:] “O.k. 3 days [lit. “nights”]? O.k.”’

[62-Story_KAD_Lion Monkey Shoes: 19]

sháácc-in ímmín gadd-í mál-i góyts lúkk-ín

hide-F.DEF give-DS put-CONV1 other-TV way go-DS

hayddzí **k’ámm-in** **kum-ám=bar í k’óótt-i kékár [...]**

three-TV night-F.DEF full-??=ICP 3M neck.LOC-TV come_across-CONV1

‘He [= Lion] gave him the hide; he [= Monkey] put it [somewhere], went the other way; after three days [lit. “after three nights had been full”], he [= Lion] met him [= Monkey] on the way [and said:] [...]’

The following sentence is not from a text, but was presented by an informant who was asked for an example of the action noun ‘dance’ (i.e. the speaker’s attention had not been directed to the use of ‘day’/‘night’).

(36) [DUU Add 63-Story_KAD_Zugga; LS100603.wav]

háttááb dóóntts-ke yéts-ke **k’ámm-e**

today dance-CRD song-CRD night-DEC

‘Today is a day [lit. “night”] of dancing and singing / of dance and music.’

An informant who worked on the text from the following example replaced the word *galáss* ‘day (12 hours)’ by the word *k’ámm* ‘night; day (24 hours)’, which he considered more correct in the given context. Our interest in ‘day’ and ‘night’ had not been pointed out to him before. When the text was worked through a second time, another informant considered the use of both *galáss* and *k’ámm* to be possible.

(37) [72-Story_WON_Lion Monkey Medicine: 68]

iz galáss-in-po [**→ k’ámm-in-po**] **zamar-ár**

3F day-F.DEF-ABL night-F.DEF-ABL start-CONV2

zóbb-í gáy-aada-na dákk-í ááts[-í] gádd-ap mish-íd-e

lion-NOM baboon-M.DEF-? chase-CONV1 shift-CONV1 land.LOC-ABL send-M.PFV-DEC

‘Starting from [that] day, Lion chased / kept on chasing Baboon out of the country.’

3.3.3.2.2 *galáss*

a. 1. ‘midday’, 2. ‘day (12 hours)’

In the first example, *galáss* is most appropriately translated as ‘midday’. In (39), it refers to the sunny part of a 24-hour period.

(38) [Primer text 2]

naar-áá galáss guφ-á eed’-ákkay=dorí géénts-áá bill-ám=bara

boy-M.DEF midday stick-TV take-PFV.NEG=DOR bull-M.DEF untie-??=ICP

géénts-áá íyá dákk-ár dóm’-íd-e.

bull-M.DEF 3Mchase-CONV2 attack-M.PFV-DEC

Context: Father has gone to the market [which is usually done in the morning]. ‘At midday the boy did not take a stick but he untied the bull; the bull chased him and attacked him.’

(39) [Duu2008sept14-19]

ts’oolíntt-i galáss béntt-(í)báás-e

glow_worm-NOM day occur-M.IPV.NEG-DEC

‘Glow worms do not occur at day-time.’

b. *galáss* ‘day (of the week)’, ‘date’

Another use of *galáss* is exemplified in the following sentences:

(40) [Proverb Sa11]

bóóz-a as-í wót-í wogg-í galáss-e

stupid-TV person-TV ploughing-NOM Sunday-TV day-DEC

‘A stupid person’s ploughing is [on] Sunday [lit. “Sunday day”].’

[i.e. A stupid person works when other people take a rest.]

(41) [Duu2008sept14-19]

gabí á galáss ekk’-íír-àà?

market-TV whichday stand-M.IPV-INTERROG

‘On which day is the market?’

c. *galáss* ‘time’

In many contexts, *galáss* must be translated as ‘time’:

(42) [Duu2009mar08]

ϕétt-í galáss-ar í áál doʔ-báás
 one-TV day-EVEN 3M house stay-M.IPV.NEG
 ‘He is never [lit. “even one day”] at home.’

In this meaning, the lexeme *galáss* is frequently used in combination with ‘all’ in order to express ‘always, every time’. Such uses are not discussed because they often fall under the category of “idiomatic expressions”, which are excluded from the analysis (see § 3.3.1).

3.3.3.2.3 ‘Pass the day’ vs. ‘pass the night’

Finally, we present data on the verbs ‘pass, spend the night’ (*ak’-*) and ‘pass, spend the day (12 hours)’ (*ϕééshk-*) in Basketo: whereas *ak’-* can also be used to express ‘spend time’, *ϕééshk-* seems to be restricted to the interpretation ‘pass, spend the day (12 hours)’. Consider the following examples:

a. *ak’-* ‘pass the night (12 hours)’

(43) [LS100372.wav]

kóssh ak’-î?
 good pass_the_night-2SG.PFV.INTERROG
 ‘Have you passed the night well?’

b. *ak’-* ‘pass the time, spend time’

The following examples illustrate the semantic extension of the verb.

(44) [Proverb Sa16]

tabz-í láyttt ak’-íno-n wudír-in
 seven-TV year pass_the_night-REL.PFV-DEF girl/virgin-F.DEF
fiáttááb táání iss-í eŋ-áb-e gá-ár
 today 1SG marry-CONV1 take-2SG.IMP-DEC say-F.CONV2
ϕééní sott-á wod’-ád-e gé-yd-e
 REFL.OBJ hang-F.CONV1 kill-F.PFV-DEC say-M.PFV-DEC
 ‘The girl who spent 7 years [waiting] says “Marry me today!” and [then] hangs herself, it is said.’

(45) [Proverb Sa15]

barg-í	<u>ak'</u>-is-íno-n	keetts-ín	seet-í
rainy_season-TV	pass_the_night-CAUS-REL.PFV-DEF	house-F.DEF	dry season-TV
micc-ídi	gé-yd-e		
burn-M.PFV	say-M.PFV-DEC		

‘A house which served as a shelter during the rainy season [lit. “which made one pass the rainy season”] burned in the dry season, it is said.’

c. *φέέshk-* ‘pass the day’

No semantic extension attested.

(46) [260-Story_MEN_Zugga Milk: 37]

táání	naagár	<u>φέέshk</u>-ásto!
1SG	watch-CONV2	pass_the_day (12h)-1SG.HORT

‘Let me watch [the milk] during the day! / Let me pass the day watching the milk!’

From these examples, it is clear that the opposition *k'ámm/galáss* can be neutralised in two directions in Basketo. However, the neutral use of *galáss* is not common in the language. The most common equivalent to English *day* (in the sense of a 24-hour period) is certainly *k'ámm*.

3.4 Conclusions

This article began with some theoretical problems regarding Coseriu’s theory of neutralisation with respect to the field of the lexicon. We explored the possibility of an alternative structural-functional approach to the semantic variation of the unmarked term of neutralisable oppositions that might be more compatible with the structural-functional postulate of lexical homogeneity. The members of a neutralisable opposition might be analysed as having only one systematic meaning (oppositional in kind) from which a neutral and generic meaning can be derived. This latter meaning could then be described as a semantic variant on the level of the norm. An important consequence of this alternative approach is that the notions of neutralisability and neutralisation become theoretically superfluous and thus might be better off abandoned. We also pointed out some problems connected with this alternative approach, particularly that it might fail to recognise the specific semantic nature of neutralisable oppositions. We also posited several arguments in favour of an account in terms of neutralisation/duosemy. The main

drawback of this approach is that one would have to accept two *valeurs/signifiés* for one linguistic item. Another limitation is that this approach cannot account for neutralisations that are bidirectional.

The possibility of bidirectional neutralisation was exemplified in the empirical part of the study. It was shown that Coseriu's claim about the unidirectionality of neutralisable oppositions is consistent with data from present-day German concerning *Tag* and *Nacht*, but is inconsistent with data from Old- and Middle High German and Old Saxon and data from Basketo (a non-European language). The following conclusions can be drawn from the synchronic analysis of German *Tag/Nacht*: neutral uses of *Tag* are very frequent and generally appear in contexts expressing duration, temporal distance, time span (in which an event, process or activity is to be situated) and frequency. The word *Nacht* cannot be used in a neutral way. An interesting question for further research would be whether neutralisations with respect to other lexical oppositions in German are as frequent as with the lexical pair *Tag/Nacht*.

In addition, the diachronic and typological data showed that, at a certain time in a given language, the opposition between the lexical units for 'day' and 'night' can be neutralised in two directions. An interesting question would be whether some present-day lexical oppositions in German are also neutralisable in two directions and whether there are differences in this respect between nouns, adjectives and verbs. This question can be extended into the field of grammar, i.e. whether some grammatical oppositions are neutralisable in multiple directions.

The finding that neutralisation can be bidirectional is problematic for a theory of neutralisation, which assumes a unidirectional inclusive relationship between a marked and an unmarked term. The problem is that, if one draws upon the notion of markedness when explaining the mechanism of semantic neutralisation, then one would have to describe both terms of an opposition as equally unmarked in the case of bidirectional neutralisation. However, this seems to decrease the explanatory power of the notion of markedness. It is therefore arguably less problematic to take the categories "marked" and "unmarked" as relative and gradual categories rather than as absolute ones. That is to say, one of the terms of a neutralisable opposition can be described as unmarked in the sense that it is "most common and usual" to use this term rather than the other one for the neutral meaning. The marked term then, is the term that is less commonly or usually used in neutralisation contexts (this analysis may also apply to the Old Germanic and Basketo examples discussed in the article).

Regardless, in order for a Coserian theory of neutralisation to acquire a greater cogency in the future, the possibility of bidirectional neutralisation is an issue that must be taken into account.

List of abbreviations (Basketo examples)

1SG.HORT	first person singular hortative
CAUS-REL.PFV-DEF	causative relative perfective definite
COND	conditional
CONV1	converb 1
CONV2	converb 2
CRD	coordination
DAT	dative
DEC	declarative
DS	different subject
F.DEF	feminine definite
F.DEF-ABL	feminine definite-ablative
F.DEF=ICP	feminine definite=instrumental/comitative/perlative
F.IPV-DEC	feminine imperfective-declarative
F.PFV-DEC	feminine perfective declarative
ICP	instrumental/comitative/perlative
LOC	locative
M.DEF	masculine definite
M.IPV.NEG	masculine imperfective negative
M.IPV.NEG-DEC	masculine imperfective negative-declarative
M.IPV-INTERROG	masculine imperfective-interrogative
M.PFV	masculine perfective
M.PFV-DEC	masculine perfective-declarative
NOM	nominative
PFV.NEG=DOR	perfective negative=dor-morpheme (same subject morpheme whose exact function is still unknown)
PL	plural
REFL.OBJ	reflexive objective
REL.PFV-DEF	relative perfective definite
SG	singular
TV	terminal vowel (function still unknown)
TV=INSIDE	terminal vowel=inside (= marks a clitic boundary)

Chapter 4

The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study

In both German and Dutch, masculine personal nouns (e.g. *smoker*, *winner*, and *therapist*) can be used either generically, i.e. referring to both women and men, or specifically, i.e. referring to only men. Regarding German, research indicates that generic uses of masculine personal nouns are strongly male-biased in comparison with alternative generics. In Dutch, masculine terms and neutralising terms are reported to be increasingly used in reference to both women and men. This study investigates, by means of two survey experiments, (i) how German and Dutch native speakers interpret masculine personal nouns used in a referential context, (ii) which variables this interpretation is associated with (including subject gender, number, definiteness, type of lexical unit, and relative frequency), and (iii) how the participants evaluate the referential possibilities of these nouns. Firstly, the results of the study indicate that masculine personal nouns are more frequently interpreted as gender-specific terms in German than in Dutch. Secondly, the interpretation of the German and Dutch nouns is found to be significantly associated with the variables number, lexical unit type, and relative frequency. Thirdly, German masculine personal nouns appear to be more restrictive in terms of potential references than their Dutch counterparts.

4.1 Introduction

In both German and Dutch, masculine personal nouns have a dual potential for reference: they can be used either generically, i.e. in reference to persons irrespective of their natural gender, or specifically, i.e. in reference to males. The generic use of masculine nouns, also known as the *generic masculine*, has been a key issue in feminist language critiques (Trömel-Plötz, 1978; Ulrich, 1988; Hellinger, 1990; Braun, 1991; Doleschal, 1998, among others, for German; Rubinstein, 1979; van Alphen, 1983; Verbiest, 1991, 1997; Sneller & Verbiest, 2000; Mortelmans, 2008, among others, for Dutch). In particular, these authors argue that masculine generics, as in (1) and (2), contribute to the linguistic under-representation of women:

- (1) Jeder **Raucher** weiß, dass seine Gewohnheit schädlich ist. (Niederösterreichische Nachrichten, 04.11.2008)
'Every smoker (masc.) knows that his habit is harmful.'
- (2) De **winnaar** mag optreden tijdens het festival in Groningen. (38 Miljoen Woordencorpus, MCDEC92OVE.SGZ)
'The winner (masc.) may perform during the festival in Groningen.'

To prevent women from being linguistically ignored, the replacement of generic masculines with other, "non-sexist" expressions has been suggested (Bußmann & Hellinger 2003: 154-157; Braun et al. 2005: 3; Lievens et al. 2007: 21-23). Generally, two alternatives are available. *Neutralising* strategies involve the use of a single term that does not differentiate gender, as illustrated in (3) to (5):

- (3) epicene nouns (cf. Corbett 1991: 67): die Führungskraft/de bewindspersoon 'the member of government'
- (4) non-differentiating forms: *die Angestellten* (plural of both *die Angestellte* 'the female employee' and *der Angestellte* 'the male employee'), *de computerdeskundige* 'the computer expert'
- (5) collectives: *das Personal/het personeel* 'the staff'

In contrast, *feminising*, or *differentiating*, forms overtly mark the presence of women:

- (6) long splitting: jeder Student und jede Studentin/elke student en studente 'every (male and female) student'

- (7) short splitting: *WählerInnen* ‘voters’, *Apotheker/innen* ‘pharmacists’, *jedeR* ‘each’, *elke student(e)* ‘every (male and female) student’¹
- (8) adjectival modification: *männliche und weibliche Teilnehmer*/mannelijke en vrouwelijke deelnemers ‘male and female participants’

For German, a number of empirical studies have been conducted to investigate the effects of the various types of generics (masculine, neutralising, and feminising generics) on the cognitive inclusion of women (Klein 1988; Scheele & Gauler 1993; Irmen & Köhncke 1996; Braun et al. 1998; Stahlberg et al. 2001; Stahlberg & Sczesny 2001).² Using different research techniques (sentence completion task, reaction time measurement, reading task, and questionnaire), all of these studies arrive at similar conclusions: masculine generics trigger the lowest or slowest cognitive inclusion of women, whereas alternative generics lead to a higher or faster cognitive representation of women. According to Bußmann & Hellinger (2003: 160), this finding is indicative of the fact that masculine personal nouns in German “are losing some of their (alleged) ‘generic’ potential and are becoming more male-specific.” They mention that there is a growing tendency in present-day German to enhance female visibility by means of feminisation. The choice for this strategy is a consequence of several factors (Bußmann & Hellinger 2003: 166)³: the existence of a productive feminising suffix *-in*, the increasing congruence in current German between grammatical and natural gender, and the implementation of official language regulations favouring gender specification in contexts that include women. However, it should be noted that in practice, the use of feminine forms is largely restricted to contexts of individual female reference (cf. Lutjeharms 2004: 196). When reference is made to a group of people (e.g. *Viele Studenten haben gestern in Dresden demonstriert* ‘Many students demonstrated in Dresden yesterday’) or to a particular category (e.g. *Wie viel kostet ein Student durchschnittlich im Jahr?* ‘How much does a student cost on average per year?’), the generic masculine is still preferred (Stuckard 2000).

For Dutch, a systematic empirical investigation into generics has not yet been performed. The existing literature has mainly focused on more theoretical issues regarding the morphology, semantics, and pragmatics of masculine and feminine personal nouns (De Caluwe & van Santen 2001; Gerritsen 2002: 81-108; van Santen 2003: 7-26; Lutjeharms 2004: 202-205; Lievens et al. 2007: 19-26 and Mortelmans 2008: 7-19). With

¹ These alternatives are restricted to written language. Moreover, Häberlin et al. (1992) criticise these forms because they are difficult to pronounce and distort orthographic continuity (cf. Bußmann & Hellinger 2003: 155).

² Detailed discussions of these empirical studies are found in Bußmann & Hellinger (2003: 160-161) and Braun et al. (2005). Therefore, we refrain from providing an extensive overview here.

³ For a historical account of this German tendency, see Kastovsky & Dalton-Puffer (2002: 285-296).

respect to the use of the various types of generics, there does not appear to be a clear preference in Dutch for either feminising or neutralising forms to avoid “sexist” language. Contrary to German, there are no official guidelines recommending either feminising or neutralising strategies in Dutch. Another difference is that in Dutch, for a considerable number of lexical units, feminising (9) or neutralising alternatives (10) do not exist or are of questionable acceptability:

- (9) *therapeut* ‘(male) therapist’ – *therapeute* ‘female therapist’, but *arts* ‘(male) doctor’ – **artse* ‘female doctor’, *rechter* ‘(male) judge’ – **rechtster* ‘female judge’
- (10) *leerkracht* ‘teacher’ vs. *leraar* ‘male teacher’ and *lerares* ‘female teacher’, but **weerpersoon/-mens* ‘weather forecaster’ vs. *weerman* ‘male weather forecaster’ and *weervrouw* ‘female weather forecaster’.

Consequently, there is significant variation depending on the lexical unit, context, and individual speaker. Gerritsen (2002: 102-105) reports that masculine terms (e.g. *medewerker* ‘(male) co-worker’) and neutralising terms (i.e. nouns that have no feminine counterpart, such as *arts* ‘doctor’, or are inherently gender-neutral, e.g. *hoofd* ‘head’) are increasingly used in reference to both women and men. This finding is consistent with the claim advanced by several authors that there has been a decrease in the number of productive feminising suffixes in Dutch (e.g. Lutjeharms 2004: 205).

Despite the continuing debate on gender-fair language use in both German- and Dutch-speaking countries, the question of how masculine personal nouns are actually interpreted by German and Dutch native speakers has yet to be examined in a focused empirical study. For Dutch, solid empirical research is simply lacking altogether. Although a substantial body of research exists for German, these studies have thus far only examined the impact of masculine generics on the cognitive availability of the concepts “male” and “female” in comparison to other types of generics. However, the attestation that masculine generics produce a stronger male bias than feminising or neutralising generics is uninformative regarding the conditions under which a gender-specific or gender-neutral interpretation of masculine personal nouns occurs.

This article focuses on the interpretation of masculine personal nouns by German and Dutch native speakers. We hypothesise that the interpretation of masculine personal nouns in actual language use is largely motivated by a number of linguistic and non-linguistic features. The aim of this study was to determine the influence of these features by means of a carefully designed questionnaire study. The features that we examined included the *type of lexical unit*, *number*, *definiteness*, *relative frequency of the lexical unit*, and *gender of the subjects*.

A comparison between German and Dutch is particularly interesting, as both languages are closely related from a typological viewpoint but have a different grammatical gender system: whereas German has a three-gender system, distinguishing between masculine,

feminine, and neuter, Dutch only has two grammatical genders, combining masculine and feminine as a common gender.

Table 1 illustrates the differences between German and Dutch in terms of morphological gender marking. In German, modifying or dependent elements such as articles, adjectives, and pronouns exhibit morphological variation in the singular, depending on the noun specified, cf. *der große Mann* ('the tall man') vs. *ein großer Mann* ('a tall man'). In Dutch, by contrast, the distinction between masculine and feminine in the singular is marked on personal and possessive pronouns but not on articles and adjectives, cf. *de/een grote man* ('the/a tall man').⁴ The gender distinction is not marked in the plural form in either language.

Table 1: Gender marking in Dutch and German

Masculine singular			
	Definite	Indefinite	Personal Pronoun
Dutch:	de grote man	een grote man	hij
German:	der große Mann 'the tall man'	ein großer Mann 'a tall man'	er 'he'
Feminine singular			
	Definite	Indefinite	Personal Pronoun
Dutch:	de grote vrouw	een grote vrouw	zij
German:	die große Frau 'the tall woman'	eine große Frau 'a tall woman'	sie 'she'
Neuter singular			
	Definite	Indefinite	Personal Pronoun
Dutch:	het grote gebouw	een groot gebouw	het
German:	das große Gebäude 'the tall building'	Ein großes Gebäude 'a tall building'	es 'it'
Feminine/Masculine/Neuter plural			
	Definite/Indefinite		Personal Pronoun
Dutch:	(de) grote mannen/vrouwen/gebouwen		zij
German:	(die) große(n) Männer/Frauen/Gebäude '(the) tall men/women/buildings'		sie 'they'

Given the higher degree of morphological differentiation between masculine and feminine in German as well as the possibility to feminise almost all personal nouns morphologically (with the suffix *-in*), we expect that grammatical gender and natural gender are

⁴ The use of the uninflected adjective form, e.g. *een groot man* ('a tall man'), is possible in Dutch but entails a semantic difference. *Een grote man* refers to a man tall in height, whereas *een groot man* refers to a tall man in a figurative sense, for instance, a man of large historical importance. Note that *een groot vrouw* is less acceptable in Dutch.

more strongly associated in German than in Dutch and that accordingly, grammatically masculine personal nouns are more frequently interpreted as gender-specific (i.e. as ‘referring to a male’) in German than in Dutch.

The remainder of this article is structured as follows. In § 4.2, the methodological design of our experiment is explained, and hypotheses are formulated. The results of our study are presented and discussed in § 4.3. § 4.4 provides a brief summary of our main conclusions.

4.2 Methodology and hypotheses

4.2.1 Questionnaire design and subject sample

To compare German and Dutch interpretations of masculine personal nouns, we conducted an experiment among 64 native speakers of German and 64 native speakers of Dutch.⁵ Each group consisted of 32 female and 32 male participants. All subjects were students of linguistics between 19 and 28 years old at the University of Tübingen (for the German sample)⁶ and the University of Ghent (for the Dutch sample). The experiment was administered in the form of a questionnaire, which was produced in both languages and answered anonymously. The data were collected by means of an online survey created using the open source application Limesurvey. An email was sent to the participants, which provided them with a hyperlink to the questionnaire. The answers of the completed questionnaires were exported to Excel, where they were annotated according to the variables in which we are interested, including type of lexical unit, number, definiteness, relative frequency, and gender of the subjects (cf. § 4.2.2). All statistical data analysis was performed with SPSS 19.

The questionnaire involved two tasks. In the first task, participants were asked to interpret masculine personal nouns by answering the following multiple-choice question: “What is the natural gender of the referent(s) which the underlined noun refers to in the given context?” The possible answers were “male”, “female”, or “male and/or female” (§

⁵ The experimental subjects in the present study were native speakers of *Belgian* Dutch (Flemish). One should thus be careful in extrapolating the results obtained in our experiment to speakers of Dutch in the Netherlands (*Hollandic* Dutch).

⁶ We would like to thank Daniel Steiner and Johannes Kabatek for recruiting participants at Tübingen University.

4.2.2). In the second task, subjects were invited to respond to further questions according to the answers they gave in the first assignment (§ 4.2.3).

4.2.2 Task 1

In the first task, 22 stimulus sentences were presented to the participants, of which 16 sentences included a personal noun that was morphologically masculine. Because the answer to these experimental sentences was expected to be either “male” or “male and/or female”, 6 filler sentences were randomly inserted with a personal noun that was morphologically feminine. These fillers were included to ensure that the participants would occasionally have a clear incentive to mark the answer option “female”. The feminine nouns that were used in these sentences are specified in Table 2.⁷

Table 2: Feminine nouns used in the questionnaire as fillers

German	Dutch	English
<i>Journalistin</i>	<i>journaliste</i>	‘female journalist’
<i>Sängerin</i>	<i>zangeres</i>	‘female singer’
<i>Fahrerin</i>	<i>bestuurster</i>	‘female driver’
<i>Trinkerin</i>	<i>alcoholiste</i>	‘female alcoholic’
<i>Ministerin</i>	-	‘female minister’
<i>Wählerin</i>	-	‘female voter’
-	<i>agente</i>	‘female cop’
-	<i>acrobatte</i>	‘female acrobat’

The responses to these feminine forms were excluded from the statistical analysis, as we were specifically interested in the speaker’s interpretation of the morphologically masculine items.

We also excluded generic contexts such as *Ärzte haben ein hohes Einkommen/Artsen hebben een hoog inkomen* (‘Doctors have a high income’), which receive a generic interpretation by default from the questionnaire. All sentential contexts included in the questionnaire involved referential contexts, i.e. contexts in a specific spatio-temporal setting with one or more specific referents.

Finally, non-linguistic factors such as ontological frequency (i.e. frequency in the world, Haspelmath 2006: 21) and gender stereotypes were controlled as much as possible. Thus, nouns carrying a male or female bias because they refer to an occupation or activity that is traditionally performed by more men than women (e.g. *soldier*), or vice versa (e.g. *nurse*), or contexts containing gender-stereotypical information (e.g. someone repairing a

⁷ The Dutch questionnaire was modelled on the German version, and because the feminine counterparts of *minister* ‘minister’ (**ministerin*) and *kiezer* ‘voter’ (**kiezeres*) do not exist in Dutch, two different nouns were chosen.

car or doing the laundry) were omitted from the experiment. Other non-linguistic variables, such as age and educational background, were controlled through the choice of the subjects.

In the following sections, the variables that were used in our experimental design are discussed along with the hypothesised effects.

4.2.2.1 Interpretation (outcome variable)

This categorical variable contains three levels associated with the possible answers that the subjects could give to each test sentence. The interpretation was coded as “non-neutral” (i.e. gender-specific) if “male” was selected and “neutral” (i.e. gender-neutral) if “male and/or female” was selected. The answer “female” was only relevant for the filler sentences and is therefore not included in our data analysis (no subject selected “female” in response to a masculine personal noun).

4.2.2.2 Type of lexical unit

The personal nouns that were used in the 16 experimental sentences were of two types: occupational vs. non-occupational. Occupational nouns are defined as personal nouns that refer to the agent of a certain professional occupation, such as *politician*, *doctor*, and *actor*. Non-occupational nouns are personal nouns that refer to the agent of a more general action, such as *visitor*, *spectator*, and *reader*. Table 3 presents an overview of the occupational and non-occupational items that were used in the experiment.

Table 3: German and Dutch occupational and non-occupational items used in the experiment

	German	Dutch	
Occupational:	<i>Apotheker</i>	<i>apotheker</i>	‘pharmacist’
	<i>Arzt</i>	<i>arts</i>	‘doctor’
	<i>Assistant</i>	<i>assistent</i>	‘assistant’
	<i>Athlet</i>	<i>atleet</i>	‘athlete’
	<i>Künstler</i>	<i>kunstenaar</i>	‘artist’
	<i>Musiker</i>	<i>muzikant</i>	‘musician’
	<i>Politiker</i>	<i>politicus</i>	‘politician’
	<i>Schauspieler</i>	<i>acteur</i>	‘actor’
Non-occupational:	<i>Abonnent</i>	<i>abonnee</i>	‘subscriber’
	<i>Begleiter</i>	<i>begeleider</i>	‘companion’
	<i>Besucher</i>	<i>bezoeker</i>	‘visitor’
	<i>Bewohner</i>	<i>bewoner</i>	‘inhabitant’
	<i>Leser</i>	<i>lezer</i>	‘reader’
	<i>Mieter</i>	<i>huurder</i>	‘tenant’
	<i>Schüler</i>	<i>leerling</i>	‘pupil’
	<i>Zuschauer</i>	<i>toeschouwer</i>	‘spectator’

We expected occupational nouns to be positively associated with a gender-specific (i.e. male) interpretation based on the assumption that these terms more readily conjure up the image of a specific (in this case, usually male) individual.

4.2.2.3 Number and Definiteness

To examine the influence of number (singular or plural) and definiteness (definite or indefinite), each noun was presented in four different contexts, viz. singular + definite, singular + indefinite, plural + definite, and plural + indefinite.⁸ To avoid participants having to respond more than once to the same noun in the first task of the questionnaire, four versions of the questionnaire, differing only with respect to the number and definiteness of the personal nouns under investigation, were designed as illustrated in (11).

- (11) Q1. **Der Besucher** aus Taiwan war vor allem an der Berliner Architektur interessiert.
De bezoeker uit Taiwan was vooral in de Berlijnse architectuur geïnteresseerd.
‘**The visitor** from Taiwan was especially interested in the Berlin architecture.’
Q2. **Ein Besucher** aus Taiwan war vor allem an der Berliner Architektur interessiert.
Een bezoeker uit Taiwan was vooral in de Berlijnse architectuur geïnteresseerd.
‘**A visitor** from Taiwan was especially interested in the Berlin architecture.’
Q3. **Die Besucher** aus Taiwan waren vor allem an der Berliner Architektur interessiert.
De bezoekers uit Taiwan waren vooral in de Berlijnse architectuur geïnteresseerd.
‘**The visitors** from Taiwan were especially interested in the Berlin architecture.’
Q4. **Besucher** aus Taiwan waren vor allem an der Berliner Architektur interessiert.
Bezoekers uit Taiwan waren vooral in de Berlijnse architectuur geïnteresseerd.
‘**Visitors** from Taiwan were especially interested in the Berlin architecture.’

Thus, each version of the questionnaire consisted of an equal number of singular definite, singular indefinite, plural definite, and plural indefinite personal nouns. The four questionnaires were evenly distributed to female and male participants (i.e. 16 participants per questionnaire version, consisting of 8 females and 8 males). Our hypothesis was that singular nouns would be positively associated with a non-neutral interpretation (or conversely, that plural nouns would be positively associated with a neutral interpretation). We also expected that definite nouns would tend to be interpreted more frequently as non-neutral rather than indefinite nouns.

4.2.2.4 Relative frequency

The relative frequency of the masculine nouns was defined as the ratio between the absolute frequency of the masculine nouns and the absolute frequency of their feminine

⁸ This is also the reason that both variables are discussed together in one subsection rather than separately.

counterparts (if such a counterpart exists).⁹ The absolute frequency of the German and Dutch masculine nouns was collected from *Cosmas II* and the *38 Miljoen Woordencorpus*, respectively.

An overview of the relative frequencies is presented in Table 4.

Table 4: Relative frequencies (RF)

German	RF	Dutch	RF
Zuschauer	85	apotheker	–
Besucher	30	abonnee	–
Abonnent	29	arts	–
Politiker	18	toeschouwer	1498
Musiker	15	huurder	416
Mieter	14	leerling	226
Bewohner	14	muzikant	194
Arzt	13	bezoeker	64
Leser	7	lezer	44
Apotheker	6	politicus	44
Athlet	6	bewoner	40
Schüler	5	kunstenaar	11
Begleiter	5	begeleider	10
Künstler	4	assistent	7
Assistant	4	atleet	4
Schauspieler	3	acteur	2

The nouns in Table 4 are ranked according to their relative frequency (from high to low). A relative frequency of 2 for *acteur*, for example, means that the masculine term is twice as frequent in the corpus sample as its feminine counterpart.

If we compare the German relative frequencies with the median relative frequency of the Dutch nouns (*politicus*, 44), it appears that *Zuschauer* (85) is the only item that ranks higher than the median relative frequency of the Dutch items. This implies that the high relative frequencies in German are generally far below those in Dutch. It appears likely that these differences in relative frequencies between Dutch and German, which are actual usage differences, also affect the interpretation of these items. We hypothesised that a low relative frequency is indicative of a more pronounced opposition between masculine and feminine. Therefore, a low relative frequency was expected to correlate with a non-neutral interpretation. Conversely, a high relative frequency implies that the feminine term is far less frequent than its masculine opposite (or does not even exist in some cases).

⁹ The relative frequencies of *apotheker* ‘pharmacist’, *abonnee* ‘subscriber’, and *arts* ‘doctor’ could not be calculated because a feminine alternative did not occur in the corpus. This might be because the feminine form simply does not exist (in the case of *arts* and *abonnee*) or because it is not standard Dutch (*apothekeres* is possible in dialectal use, particularly by older people, but is being suppressed by *apotheker*).

Accordingly, it was hypothesised that a high relative frequency should correlate with a neutral interpretation.

Because the Dutch masculine forms are far more frequent than the German items (that is, relative to their feminine counterparts), we specifically hypothesised that Dutch items would be understood more frequently as gender-neutral terms than their German equivalents.

4.2.2.5 Subject's gender

The only non-linguistic variable that we examined is the natural gender of the experimental subjects (two levels: male or female). Massner (2010: 62) argues that women are more sensitive to gender distinctions. Accordingly, we hypothesised that women are more inclined to assign a gender-specific interpretation to the experimental masculine personal nouns.

4.2.3 Task 2

In the second task, subjects were presented with additional questions that pertained to their answers in the first task.

- If the answer to the first question was “male” or “female” in response to a singular noun, then participants were asked in the second task whether it would be possible to use the underlined noun in the given context to refer to a female or male person.
- If the answer to the first question was “male” or “female” in response to a plural noun, then participants were first asked whether it would be possible to use the underlined noun in the given context to refer to a group consisting only of females or a group consisting only of males. Secondly, they were asked whether it would be possible to use the underlined noun in the given context to refer to a group consisting of both males and females.

In this set of additional questions, participants could assess the degree of possibility on a four-point Likert scale: “certainly possible” (1), “possible, but unusual” (2), “hardly possible” (3), or “certainly not possible” (4).

- If the answer to the first question was “male and/or female” in response to a singular or a plural noun, participants were then asked whether they nonetheless preferred either of the natural genders. Possible answers to this additional question were “male”, “female”, or “no preference”.

As we were only interested in the responses to the morphologically masculine personal nouns, the answers to the questions in the second task that related to a feminine personal noun in the first task were excluded from the analysis. Contrary to the first task, which was created to determine participants' spontaneous interpretations, the second task was

designed to assess participants' perceptions of the referential possibilities of the masculine personal nouns at hand. We hypothesised that the higher degree of gender-neutrality of Dutch masculine personal nouns, which we already expected to observe in the first task, should also be clear in the second task. First, the degree of possibility of initial "male" responses to also refer to female persons was considered to have a higher average score in German than in Dutch (reflecting a lower degree of possibility). In addition, the number of participants selecting the answer options (1) and (2) in the additional questions of initial "male" responses (which indicates a high degree of possibility) was predicted to be lower in German than in Dutch. Second, regarding the answer to the question whether there would be a preferential interpretation if the answer in the first task was "male and/or female", we expected that there should be a stronger "male" preference in German than in Dutch.

It should be noted that our experiment was methodologically informed by Massner (2010). Massner (2010) confronted participants with a series of sentences that they were required to assign to one of the following categories: "Mann" 'man', "Frau" 'woman', "Mann und/oder Frau" 'man and/or woman' or "weiß nicht" 'do not know'.¹⁰ The aim of Massner's study was to investigate a wide variety of variables that might affect participants' interpretations of masculine personal nouns and pronouns. Unfortunately, however, the design of Massner's study was not overly careful. The linguistic variables, such as type of context (referential or generic), type of lexical unit (occupational or non-occupational), number (singular or plural), and definiteness (definite or indefinite), were unevenly distributed among the experimental sentences. The non-linguistic variables, such as gender and age of the participants, were neither controlled nor systematically varied. The conclusions drawn in that study were thus statistically inadequate. For instance, Massner (2010: 62) argues that the generic masculine produces a stronger "male" bias for women than for men based on only two examples in which female participants favoured the answer "man", whereas male participants favoured the answer "man and/or woman". A closer examination of the answers to the other experimental sentences, however, reveals that this tendency does not hold for many other sentences.

In the following section, the results of our questionnaire study are discussed, beginning with the results of the first task of the questionnaire in § 4.3.1. A discussion of the results of the second task is presented in § 4.3.2.

¹⁰ The category "do not know" was deliberately omitted from the answer possibilities in our experiment. In our view, this fourth category might have caused some confusion because it might not have been entirely clear to the participants what the actual difference is between stating that you do not know what the gender of the referent is and stating that it can be either male or female.

4.3 Results

4.3.1 Task 1

As outlined in the previous section, the main purpose of this part of the experiment was to test the influence of various variables on the interpretation of masculine personal nouns by German and Dutch speakers. Because we are particularly interested in evaluating the effects of the variables simultaneously, our data analysis requires a statistical method that allows one to draw such conclusions. One multivariate analysis method that is well suited for our purposes is the classification tree analysis.

Classification trees serve a variety of purposes. We specifically chose this method because it allows for a straightforward interpretation of the various interactions between the predictor variables. Another attractive feature of creating a classification tree is that the analysis results (if certain variables turn out to be significant) in a set of specific prediction rules with specified outcome probabilities, both of which can easily be verified by replication.

There are a number of growing methods available for the creation of a classification tree, each having its own advantages and disadvantages. We fitted our classification tree models by means of *IBM SPSS Statistics 19* (2010). This statistical software program provides four different growing procedures: CHAID, exhaustive CHAID, CRT and QUEST.¹¹ The classification trees that are discussed in this section were built by means of the CHAID procedure. This procedure provided us with the most adequate prediction models based on three evaluation criteria. The most adequate model should yield the best overall prediction accuracy for the samples under analysis, should have the lowest risk of misclassification (after cross-validation), and should be easy to interpret (simpler models are generally preferred over more complex models).

Two classification models – one for each language – are subsequently discussed in the next subsections.¹²

¹¹ For more information on the various growing methods, we refer to the user's manual *IBM SPSS Regression Trees 19*, IBM Inc. 1989, 2010.

¹² Here are some additional details about the specific method used that are important for replication studies. Validation method: cross-validation (number of sample folds: 10). Growing method: Maximum tree depth: automatic (3 by default); Minimum number of cases: 100 for parent node, 50 for child node; Significance level for splitting nodes: 5%; Chi-square statistic: Pearson; Maximum number of iterations for model estimation: 100; Minimum change in expected cell frequencies 0.0001; Bonferroni significance adjustment; Equal costs.

4.3.1.1 Classification tree 1: German dataset

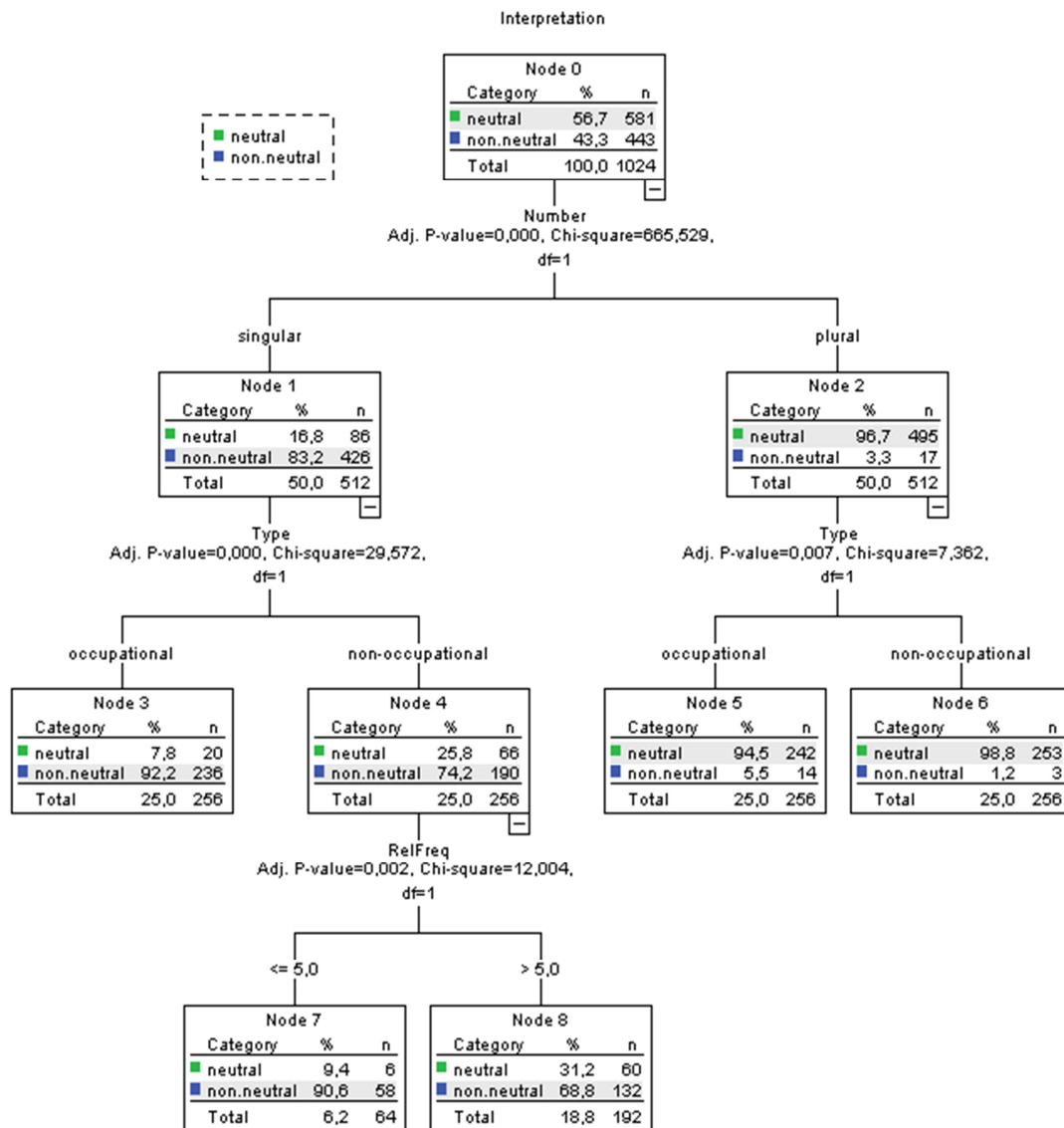


Figure 1: Decision tree model for the German dataset

This classification tree has a risk estimate of approximately 10% after cross-validation (Standard Error = 0.009). This suggests that the model offers a very good prediction of the German speakers' interpretations based on the variables that are included in this classification tree.

The tree diagram outlined in Figure 1 indicates that the interpretation of masculine personal nouns by German speakers was primarily associated with the variable number.¹³ The

¹³ The strong effect of number is also found in the other growing methods. We should also mention at this stage that a logistic regression analysis of the data would also be feasible, which we also conducted during the course of our research. Number and lexical unit type also proved significant in this analysis ($p < 0.000$), with odds ratios of 0.029 (for plural) (C.I.: 0.019–0.043) and 0.309 (for non-occupational) (C.I.: 0.218–0.439)

direction of the association was also in line with what we hypothesised: a plural noun is nearly always interpreted as neutral (97% probability, the predicted category is highlighted), whereas a singular tends to be interpreted as non-neutral (83%).

Lexical unit type was the second best predictor. With singular nouns, an occupational noun had a larger probability of being interpreted as non-neutral than a non-occupational noun, with probabilities of 92% and 74%, respectively. The additional effect of lexical unit type on plural nouns was minor, yet the total probabilities were substantial: a plural noun of a non-occupational type had a probability (in this dataset) of 99% of being interpreted as neutral, whereas the probability of an occupational noun was 94%, which is obviously still very high. The effect of lexical unit type was also in line with what we expected.

One might, perhaps, counter the latter conclusion by arguing that the high probability of occupational nouns to be interpreted as neutral refutes our hypothesis that occupational terms are preferably interpreted as non-neutral. Note, however, that 94% is the combined probability of plural and occupational rather than the probability of occupational nouns as such. Within the category of plural nouns, we observed that 14 occupational nouns were interpreted as non-neutral. This observed frequency is significantly more than what would be expected if lexical unit type and interpretation were not associated. The expected frequency for this cell is 8.5 (expected frequencies are not indicated in the tree diagram but are easily computed $[(256 \cdot 17) / 512 = 8.5]$). Clearly, the difference between the observed and expected frequencies was not high. As may be expected, the strength of the association was actually very low (Cramér's $V = 0.11$).

For non-occupational nouns in the singular, the best next predictor was the variable relative frequency. Interestingly, a singular noun (which tends to be interpreted as non-neutral) of the occupational type still had a 26% chance of being interpreted as neutral, and this probability increased for nouns with a relative frequency of more than 5, which applies to more than half of the items under analysis. For nouns with a relative frequency of less than 5, conversely, the probability of a non-neutral interpretation was 90%. This corroborates our hypothesis that masculine nouns with a low relative frequency tend to be associated with a non-neutral interpretation, as a low frequency may be considered indicative of a more pronounced distinction between masculine and feminine (remember that a

(reference value: non-neutral). Thus, based on this logistic regression analysis, the odds of a plural noun being interpreted as non-neutral were approximately 2% of those of singular (i.e. very unlikely); the odds of a non-occupational term being interpreted as non-neutral were approximately 30% of those of an occupational term (the impact effect is, accordingly, less strong than for number). Notwithstanding the acceptable quality of this logistic regression model (Hosmer-Lemeshow > 0.05 , Nagelkerke $R^2 = 0.523$, the correct classification score of 80% in comparison to a baseline prediction of 63%), we prefer the classification analysis, as it allows for a more detailed exploration of tendencies involved in the speaker's interpretation. The estimated odds ratios provided by the logistic regression analysis (one of the advantages of a logistic regression analysis) are certainly interesting, but we find them less informative than the interactions found in the classification model.

low relative frequency means that the morphologically feminine counterpart is frequently used).

All of the effects of the variables included in this classification model are in line with the hypotheses that we tested in the previous section. The effects remain as expected, even in interaction with other variables. Thus, an occupational noun in the plural is less likely to be interpreted as neutral than a non-occupational noun in the plural. These interaction effects make this statistical method very useful for our purposes.

Two variables did not contribute significantly to our model: subject gender and definiteness. Based on this model and the results of our experiment, we have no evidence that these variables influence the interpretation of masculine nouns by German speakers.

4.3.1.2 Classification tree 2: Dutch dataset

The misclassification risk of the classification tree for our Dutch dataset was 15% (Standard Error = 0.011) and was thus somewhat larger than that for German, which means that this model's prediction accuracy is slightly worse than that for German.¹⁴

The same tendencies as those observed for German were found for Dutch. Firstly, we found that the same three variables that are included in the classification tree for German are also involved in Dutch, namely, number, lexical unit type, and relative frequency. No evidence was found for the variables subject gender and definiteness. Secondly, the same general tendencies of prediction as those found for German were observed for Dutch (cf. Figure 2).

¹⁴ A logistic regression analysis of the data was performed, and it was significant for two variables: lexical unit type and number ($p < 0.000$). Odds ratios: 0.010 for plural (C.I.: 0.06–0.018) and 0.149 (for non-occupational) (C.I.: 0.88–0.251) (reference value: non-neutral). Thus, the odds of a plural noun being interpreted as non-neutral was approximately 1% of the odds of singular (i.e. very unlikely), whereas the odds of a non-occupational term being interpreted as non-neutral was approximately 15% of the odds of an occupational term (also unlikely). The model quality was also good (Hosmer-Lemeshow > 0.05 ; Nagelkerke $R^2 = 0.660$; the model has a correct classification score of 85.5% (baseline = 59%).

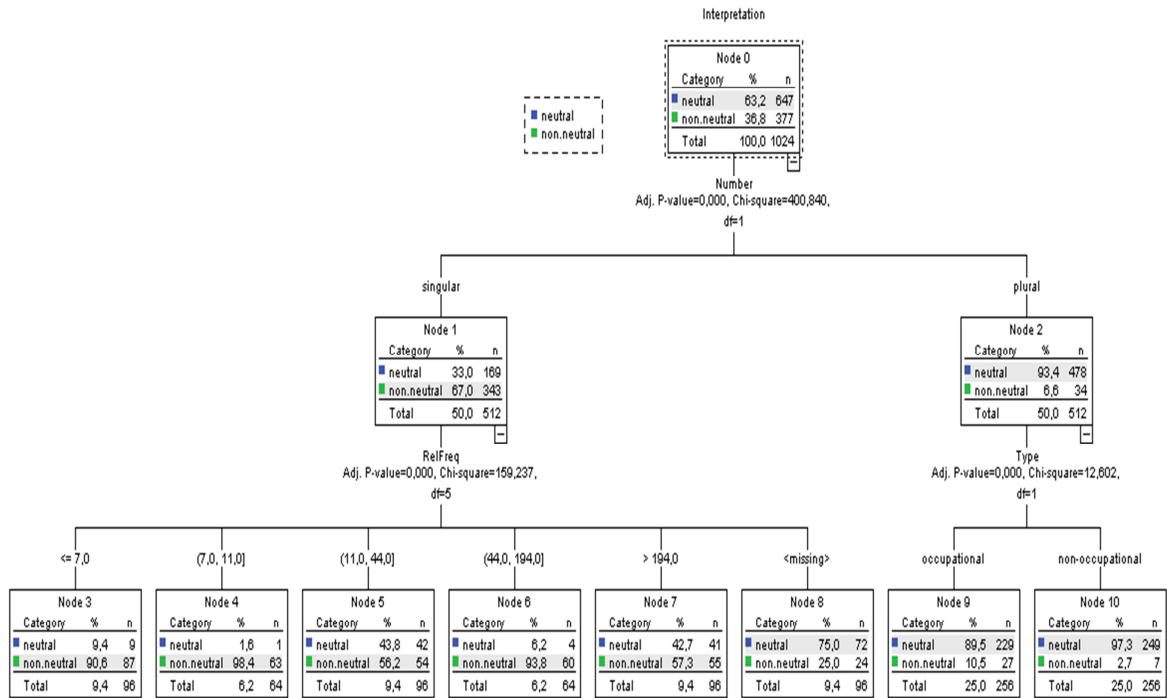


Figure 2: Decision tree model for the Dutch dataset

Regarding the main results, number was the best predictor of interpretation, with plural nouns preferably interpreted as neutral (93%) and singular nouns as non-neutral (67%). For plural nouns, the second best predictor was lexical unit type. Plural occupational nouns and non-occupational nouns had a probability of approximately 90 and 97%, respectively, of being interpreted as neutral.

For the singular nouns, relative frequency was the only significant predictor of the outcome variable interpretation. A comparison between the highest and lowest relative frequencies suggests that a high relative frequency (cf. “missing”) is associated with a high probability of being interpreted as neutral, and a low relative frequency is associated with a high probability of being interpreted as non-neutral (cf. ≤ 7).¹⁵ Notice, however, that relative frequencies of more than 11 did not have a straightforward effect on the interpretation; whereas 94% of the nouns with a relative frequency within the range (44, 194] were interpreted as non-neutral, nouns with a relative frequency within the range of (11, 44] and higher than 194 had only slightly more than a 50% probability of being interpreted as such. Hence, there is no simple correlation between a noun’s relative frequency and its interpretation as either gender-specific or gender-neutral.

¹⁵ (x, y] reads as higher than, but not similar to, x and lower than or similar to y.

4.3.1.3 Discussion

A comparison of the German and Dutch decision trees reveals that neutral interpretations are generally more frequent than non-neutral interpretations in both German and Dutch. As we expected, the total number of neutral interpretations was higher in Dutch than in German (647 instances, or 63%, vs. 581 instances, or 57%), although the difference between both datasets was relatively small (only 66, or 6.5%, more neutral responses in Dutch than in German). The results of both experiments also confirmed our hypothesis that the interpretation of masculine personal nouns is associated with various factors. In both German and Dutch, number was the best predictor of interpretation; singular nouns tended to be interpreted as non-neutral, whereas plural nouns tended to be interpreted as neutral. A particularly interesting observation is that the Dutch masculine singular nouns were still interpreted as neutral in 169 instances (or 33%), which is almost twice as much as their German equivalents (86 instances, or 17%). This finding is consistent with our hypothesis that in Dutch, masculine personal nouns display a higher degree of gender-neutrality than in German. In the plural, the same tendencies were observed for both German and Dutch, viz., a clear preference for neutral interpretations, which was slightly more pronounced in German (97%) than in Dutch (93%). In both German and in Dutch, plural nouns of the non-occupational type were more likely to be interpreted as neutral than plural nouns of the occupational type, which is again in line with our initial hypothesis.

The observation that German plural masculine nouns had a 97% probability of being interpreted as neutral challenges the claim made by Bußmann & Hellinger (2003: 158) that there is a male bias in examples such as (12):

- (12) 45 Millionen Bürger sind zur Bundestagswahl aufgerufen.
'45 million citizens are called upon to vote for the Bundestag.'

Based on the results of our experiment, we believe that a plural noun such as *Bürger* 'citizen' would preferably receive a neutral interpretation in this context and hence, would usually not be considered to carry a male bias.

Bußmann & Hellinger's (2003: 164) conclusion that "the referential range of personal masculines has become more narrow" is not confirmed by our analysis, and more importantly, it needs to be qualified in view of the variables that may have an influence on the speaker's interpretation: singular nouns in German are associated with a strong male bias, whereas plural nouns tend to be interpreted as gender-neutral. Moreover, on the basis of Bußmann & Hellinger's claim, one would expect an overall predominance of non-neutral interpretations, which is not substantiated by our results.

The phenomenon that is discussed in this article, viz., the potential of masculine personal nouns to refer to males only or to both female and male persons, has been addressed in linguistics within the contexts of neutralisation (Coseriu 1976, 1992 [1988])

and markedness (Jakobson 1971 [1932], 1971 [1936]; Greenberg 2005 [1966]; Waugh 1982; Andersen 2001, 2008).¹⁶ In contemporary linguistics, both neutralisation and markedness have become broad semantic categories encompassing a wide variety of different phenomena (Haspelmath 2006, De Backer 2009). The basic observation that appears to underlie both notions, however, is that certain linguistic oppositions (including phonological, morphological, syntactic, and lexical oppositions) may be suppressed or blocked under specific circumstances. Thus, in German, there may be an opposition between *Arzt* and *Ärztin* as in (13). In (14), however, the opposition is cancelled, and it is the unmarked (viz., masculine) term that expresses the neutral meaning:

- (13) Ärztinnen und Ärzte bekommen Blumen von jenen Patienten, die sich inzwischen viel gesünder fühlen. (Braunschweiger Zeitung, 14.02.2006)
 ‘Female and male doctors receive flowers from those patients who are meanwhile feeling much healthier’.
- (14) Zum zweiten Mal innerhalb kurzer Zeit traten Ärzte in ganz Österreich in Streik. (Niederösterreichische Nachrichten, 02.07.2008)
 ‘For the second time in a short period, doctors in the whole of Austria came out on strike’.

Despite their widespread use, the notions of markedness and neutralisation remain controversial concepts in contemporary linguistics.

Haspelmath (2006) claims that the term markedness is, in fact, a superfluous term that is best replaced by other, less general and more straightforward terminological concepts. Haspelmath questions, in particular, the explanatory power of the notion of markedness. According to his reasoning, there are better explanations for those phenomena that have been explained in terms of markedness. One of these explanations is frequency.

As an example, Haspelmath (2006) cites the frequencies observed by Leech et al. (2001) for adjective antonyms in English (e.g. *long* vs. *short*, *high* vs. *low*), which indicate that the unmarked term (e.g. *long*, *high*) is generally more frequent than its marked counterpart. These and other similar instances of “semantic markedness”, which involve the type of relationship that we are investigating in this article, are best accounted for in terms of frequency differences according to Haspelmath.

Our multivariate analysis allowed us to expand the discussion of which variable best accounts for the observed differences in interpretation. By evaluating the role of various factors simultaneously, a more nuanced picture emerges. Our decision tree reveals that different factors are simultaneously involved in the interpretation of masculine personal

¹⁶ In neutralisation theory, the peculiar type of relationship between the members of a neutralisable pair (e.g. *day* vs. *night* or *masculine* vs. *feminine*) is also accounted for in terms of markedness. However, because the neutralisation and markedness theories differ in their descriptions of what is marked and unmarked in semantics, the concepts will be kept apart terminologically.

nouns. Our model demonstrates, moreover, that relative frequency is indeed a contributing factor but that the effect of this factor is minor and not as straightforward as Haspelmath maintains.

4.3.2 Task 2

In this section, the results of the second task of the questionnaire are presented and discussed. The purpose of this part of the experiment was to evaluate participants' perceptions of the referential possibilities of the masculine personal nouns under investigation. Participants could assess the degree of possibility on a four-point Likert scale consisting of "certainly possible" (1), "possible, but unusual" (2), "hardly possible" (3), and "certainly not possible" (4). § 4.3.2.1, § 4.3.2.2, and § 4.3.2.3 are concerned with the answers to the additional questions relating to initial "male" (non-neutral) responses. § 4.3.2.4 and § 4.3.2.5 address the answers to initial "male and/or female" (neutral) responses.

4.3.2.1 Initial "male" responses in the singular: is female reference also possible?

Table 5 shows that in the singular, there were more initial "male" responses in German (426/512, 83.2%) than in Dutch (343/512, 67%). This finding is in line with our hypothesis that German masculine nouns are more strongly correlated with a gender-specific interpretation, particularly in the singular. It can also be observed that in Dutch, there were relatively more positive responses (answer options 1, 2, and 3) to the question of whether it would also be possible to use the masculine noun in reference to a female person; in Dutch, 287 out of 343 initial "male" responses (or 84%) were re-evaluated as potentially having female reference compared to 287 out of 426 initial "male" responses (or 67%) in German. There was also a difference between German and Dutch regarding the participants' assessments of the *degree* to which it was possible to use a singular masculine noun to refer to a female person; answer options (1) and (2) were selected relatively more frequently by the Dutch participants (24 and 39% in Dutch vs. 9 and 29% in German, respectively), whereas answer options (3) and (4) were chosen relatively more often by the German participants (29 and 33% in German vs. 21 and 16% in Dutch, respectively). In German, the mean answer to the question of whether it would be possible to use a singular masculine noun in reference to a female person was 3 ("hardly possible"), whereas the mean answer was 2 ("possible, but unusual") in Dutch. The difference between German and Dutch reflects the higher degree of gender-neutrality (and hence, wider referential potential) of Dutch masculine personal nouns.

Table 5: Initial “male” responses in the singular: is female reference also possible?

German	1	2	3	4	Total	Dutch	1	2	3	4	Total
Abonnent	6	9	5	1	21	abonnee		1			1
Apotheker	1	8	10	12	31	apotheker	8	4	4	1	17
Arzt	4	9	12	7	32	arts	4	1	1		6
Assistent	3	9	9	9	30	assistent	4	17	3	3	27
Begleiter	1	8	8	11	28	begeleider	10	9	7	5	31
Besucher		8	10	7	25	bezoeker	8	12	6	2	28
Bewohner	3	8	6	5	22	bewoner	6	6	4	2	18
Künstler	1	5	8	15	29	kunstenaar	5	14	8	5	32
Leser	3	5	4	2	14	lezer	2	5		1	8
Mieter	3	8	11	3	25	huurder	5	4	1	2	12
Musiker	3	11	9	8	31	muzikant	5	18	5	4	32
Politiker	1	10	10	7	28	politicus	7	14	3	4	28
Schauspieler	5	9	7	8	29	acteur	3	8	11	10	32
Schüler	2	8	4	16	30	leerling	8	7	1	3	19
Zuschauer	3	6	4	12	25	toeschouwer	7	8	6	3	24
Athlet	1	3	6	16	26	atleet	1	5	11	11	28
Total	40	124	123	139	426	Total	83	133	71	56	343

A more detailed examination of Table 5 informs us that for some Dutch nouns, the total number of answers was particularly low, viz., *abonnee*, *arts*, *lezer*, and *huurder* (as well as *apotheker*, *bewoner*, and *leerling*). This observation indicates that for these nouns, the initial response was predominantly “male and/or female”. Moreover, the answers to the additional question mostly fall within the categories (1), (2), and (3), suggesting that reference to a female person is usually possible for this set of nouns. Interestingly, the total number of answers given to their German equivalents was comparatively higher in most cases, particularly in the case of *Abonnent*, *Apotheker*, and *Arzt*. These findings might be associated with the fact that in Dutch, the formation of a feminine counterpart is not possible or of questionable acceptability for most of these nouns (cf. **abonnes*, **artse*, *?huurster*, *?apothekeres*, *?leerlinge*). In German, by contrast, *Abonnentin*, *Ärztin*, *Mieterin*, *Apothekerin*, and *Schülerin* are perfectly normal from a morphological point of view. It might also be interesting to consider the relative frequency (cf. Table 4); the relative frequency of the aforementioned Dutch nouns is generally much higher than the relative frequency of their German counterparts, which can be associated with the observation that they are more often interpreted as gender-neutral terms in the first task and are more frequently considered to have a potential female reference. It was also found that in German, answer option (4) was selected most frequently with *Apotheker*, *Begleiter*, *Künstler*, *Schüler*, *Zuschauer*, and *Athlet*. In Dutch, the same applied to *acteur* and *atleet*. Note that almost all of these German and Dutch nouns had a low relative frequency (cf. Table 4). A final observation is that among the German and Dutch nouns that have the

least number of total answers, most of them were non-occupational nouns, suggesting that the type of lexical unit might play a role in the interpretation of singular masculine nouns.

4.3.2.2 Initial “male” responses in the plural: is exclusively female reference also possible?

From Table 6, it can be observed that there were many missing values for both German and Dutch. Furthermore, the total number of answers was low in both languages. These observations imply that plural masculine nouns were most frequently interpreted as “male and/or female” in the first task. The lower number of total answers in German compared to Dutch was somewhat surprising. We would expect the opposite because of the assumed stronger association in German between grammatical and natural gender. In any case, both answer totals only constituted a small share of all responses given to plural masculines (17/512, or 3.3%, in German and 34/512, or 6.6%, in Dutch). The German participants considered the use of plural masculine nouns to refer to a group of only female persons to be possible, to some extent, in 13 out of 17 instances (or 76.5%). According to the Dutch participants, by contrast, this type of reference was possible in 28 out of 34 cases (or 82%). The answer options (1) and (2) were chosen most frequently by both language groups (23.5 and 41% in German vs. 38 and 26.5% in Dutch, respectively). However, for some participants, reference to only female persons by means of a plural masculine noun was considered “hardly possible” (12% in German vs. 18% in Dutch) to “impossible” (23.5% in German vs. 18% in Dutch). In both German and Dutch, the mean answer to the question of whether it would be possible to use a plural masculine noun to refer to a group consisting of only female persons was 2 (“possible, but unusual”).

Table 6: Initial “male” responses in the plural: is exclusively female reference also possible?

German	1	2	3	4	Total	Dutch	1	2	3	4	Total
Abonnent		1			1	abonnee	1				1
Apotheker	1		1	1	3	apotheker	5	3			8
Arzt	1	1			2	arts	1				1
Assistent		1		1	2	assistent				1	1
Begleiter						begeleider			1	1	2
Besucher						bezoeker					
Bewohner		1			1	bewoner		1	1		2
Künstler				1	1	kunstenaar	1	1			2
Leser		1			1	lezer		1			1
Mieter						huurder					
Musiker		1			1	muzikant	1	2			3
Politiker	1				1	politicus					
Schauspieler			1		1	acteur	2	1	2	2	7
Schüler						leerling					
Zuschauer						toeschouwer	1				1
Athlet	1	1		1	3	atleet	1		2	2	5
Total	4	7	2	4	17	Total	13	9	6	6	34

A closer examination of Table 6 reveals that for the following plural nouns, the initial response was always “male and/or female”: *Begleiter*, *Besucher*, *Mieter*, *Schüler*, and *Zuschauer* in German and *bewoner*, *huurder*, *politicus*, and *leerling* in Dutch. For the following nouns, only one participant marked the answer option “male” in the first task: *Abonnent*, *Bewohner*, *Leser*, *Künstler*, *Musiker*, *Politiker*, and *Schauspieler* in German and *abonnee*, *assistent*, *arts*, *lezer*, and *toeschouwer* in Dutch. These lists of nouns suggest that initial “male and/or female” responses are more strongly associated with non-occupational nouns than with occupational nouns. It can also be observed that answer option (4) was chosen only for *Apotheker*, *Assistent*, *Künstler*, and *Athlet* in German and *assistent*, *begeleider*, *acteur*, and *atleet* in Dutch. Interestingly, all of these nouns had a low relative frequency (cf. Table 4). Most initial “male” responses were found with *Apotheker* and *Athlet* in German and *apotheker*, *acteur*, and *atleet* in Dutch, i.e. occupational nouns with a low relative frequency.

4.3.2.3 Initial “male” responses in the plural: is reference to a mixed group also possible?

Regarding the question of whether it would be possible to use a plural masculine noun in reference to a group consisting of both male and female persons, Table 7 indicates that this usage was judged to be always clearly possible by both the German and Dutch participants. Other general observations were the same as those described previously (Table 6). The mean answer to this question was 1 (“certainly possible”) for both German and Dutch.

Table 7: Initial “male” responses in the plural: is reference to a mixed group also possible?

German	1	2	3	4	Total	Dutch	1	2	3	4	Total
Abonnent	1				1	abonnee	1				1
Apotheker	3				3	apotheker	8				8
Arzt	2				2	arts	1				1
Assistent	2				2	assistent	1				1
Begleiter						begeleider	2				2
Besucher						bezoeker					
Bewohner	1				1	bewoner	2				2
Künstler	1				1	kunstenaar	2				2
Leser	1				1	lezer	1				1
Mieter						huurder					
Musiker	1				1	muzikant	3				3
Politiker	1				1	politicus					
Schauspieler	1				1	acteur	7				7
Schüler						leerling					
Zuschauer						toeschouwer	1				1
Athlet	3				3	atleet	5				5
Total	17				17	Total	34				34

4.3.2.4 Initial “male and/or female” responses in the singular: a preferential interpretation?

Table 8 demonstrates that initial “male and/or female” responses were higher in Dutch than in German (169/512, or 33%, in Dutch vs. 86/512, or 17%, in German). As we expected, there was never a preference for a singular masculine noun to refer to a female person. The total number of answers indicating that there is no preference for either of the natural genders was much higher in Dutch than in German: 101 out of 169 instances, or 60%, in Dutch vs. 19 out 86 instances, or 22%, in German. This finding confirmed our hypothesis that Dutch personal nouns are more strongly associated with a neutral interpretation than their German equivalents. By contrast, the total number of answers reflecting a preference for a male referent was lower in Dutch than in German: 68 out of 169 instances, or 40%, in Dutch vs. 67 out of 86 instances, or 78%, in German.

Table 8: Preferential interpretation with respect to initial singular “neutral” responses

German	np	m	Total	Dutch	np	m	Total
Abonment	3	8	11	abonnee	30	1	31
Apotheker		1	1	apotheker	4	11	15
Arzt				arts	19	7	26
Assistent		2	2	assistant	2	3	5
Begleiter	1	3	4	begeleider		1	1
Besucher	3	4	7	bezoeker	2	2	4
Bewohner	1	9	10	bewoner	8	6	14
Künstler		3	3	kunstenaar			
Leser	5	13	18	lezer	12	12	24
Mieter	2	5	7	huurder	12	8	20
Musiker	1		1	muzikant			
Politiker		4	4	politicus	1	3	4
Schauspieler	1	2	3	acteur			
Schüler	1	1	2	leerling	5	8	13
Zuschauer		7	7	toeschouwer	5	3	8
Athlet	1	5	6	atleet	1	3	4
Total	19	67	86	Total	101	68	169

Examining Table 8 in more detail, some singular nouns in both German and Dutch were initially never interpreted as neutral: *Arzt* in German and *kunstenaar*, *muzikant*, and *acteur* in Dutch. The following singular nouns were very infrequently interpreted as neutral: *Apotheker*, *Assistent*, *Begleiter*, *Künstler*, *Musiker*, *Politiker*, *Schauspieler*, and *Schüler* in German and *assistant*, *begeleider*, *bezoeker*, *politicus*, and *atleet* in Dutch. An interesting observation is that most of the nouns cited in these lists had a low relative frequency (cf. Table 4). A comparison of the noun pairs *Abonment/abonnee*, *Apotheker/apotheker*, *Arzt/arts*, *Mieter/huurder*, and *Schüler/leerling* reveals that the Dutch nouns were much more frequently interpreted as neutral in the first task than their German equivalents. As previously mentioned, such differences might be explained by the lower degree of productivity of Dutch derivational suffixes. Table 8 also illustrates that the following singular nouns were relatively often interpreted as neutral in the first task: *Leser*, *Abonment*, and *Bewohner* in German and *abonnee*, *apotheker*, *arts*, *bewoner*, *lezer*, *huurder*, and *leerling* in Dutch. Also here, a neutral interpretation appeared to be associated with non-occupational nouns.

4.3.2.5 Initial “male and/or female” responses in the plural: a preferential interpretation?

Finally, Table 9 indicates that with respect to plural masculine nouns, there were many “male and/or female” responses (495/512, or 97%, in German vs. 478/512, or 93%, in Dutch). As in Table 6, the observed higher frequency of initial neutral interpretations in German was somewhat unexpected, but the answer totals of the German and Dutch

participants did not differ that much. In both German and Dutch, the predominant answer to the question of whether participants prefer either of the natural genders was “no preference” (401/495, or 81%, in German vs. 330/478, or 69%, in Dutch).

Table 9: Preferential interpretation with respect to initial plural “neutral” responses

German	np	m	Total	Dutch	np	m	Total
Abonnent	30	1	31	Abonnee	30	1	31
Apotheker	17	12	29	apotheker	9	15	24
Arzt	24	6	30	arts	22	9	31
Assistent	20	10	30	assistent	21	10	31
Begleiter	25	7	32	begeleider	16	14	30
Besucher	31	1	32	bezoeker	27	5	32
Bewohner	31		31	bewoner	28	2	30
Künstler	24	7	31	kunstenaar	15	15	30
Leser	30	1	31	lezer	22	9	31
Mieter	30	2	32	huurder	28	4	32
Musiker	18	13	31	muzikant	18	11	29
Politiker	19	12	31	politicus	18	14	32
Schauspieler	23	8	31	acteur	11	14	25
Schüler	31	1	32	leerling	30	2	32
Zuschauer	31	1	32	toeschouwer	24	7	31
Athlet	17	12	29	atleet	11	16	27
Total	401	94	495	Total	330	148	478

Table 9 also illustrates that no plural nouns were never initially interpreted as neutral. In German, there were no nouns for which the answer “preferentially male” was selected more frequently in the second task than the answer “no preference”. In Dutch, a higher number of “preferentially male” responses was only observed with *apotheker*, *acteur*, and *atleet*. Exhibiting a very high number of “no preference” responses were the following nouns: *Abonnent*, *Besucher*, *Bewohner*, *Leser*, *Mieter*, *Schüler*, and *Zuschauer* in German and *abonnee*, *bezoeker*, *bewoner*, *huurder*, and *leerling* in Dutch. Note that all of these nouns belong to the class of non-occupational nouns. Conversely, a more pronounced preference for plural masculine nouns to refer to only male persons was found with *Apotheker*, *Musiker*, *Politiker*, and *Athlet* in German and *apotheker*, *begeleider*, *kunstenaar*, *politicus*, *acteur*, and *atleet* in Dutch. Almost all of these last-named German and Dutch nouns are of the occupational type (excluding *begeleider*).

The general conclusion that can be drawn from the results of the second task is that the German masculine personal nouns are more restrictive in terms of potential reference than their Dutch counterparts. This finding confirmed our hypotheses that Dutch masculine personal nouns are more frequently interpreted as gender-neutral terms and are characterised by a higher degree of gender-neutrality than German personal masculines. The data also indicate, however, that some nuance is in order. In particular, the observation that the possibility to include female reference is more limited in German than

in Dutch is much more pronounced in the singular than in the plural. Thus, the difference in referential potential between German and Dutch masculine personal nouns is clear in the singular, with German nouns receiving higher mean answer values (in case the initial answer was “male”) and fewer “no preference” responses (in case the initial answer was “male and/or female”). In the plural, however, the German and Dutch nouns appear to have similar referential possibilities (note also that those participants who assigned a neutral interpretation in the first task selected slightly more often the answer option “no preference” in the second task in German than in Dutch).

4.4 Conclusions

The purpose of this article was twofold. On the one hand, we aimed to investigate by means of a questionnaire study how German and Dutch native speakers interpret masculine personal nouns used in referential contexts and determine which variables have an influence on the interpretation. On the other hand, we wanted to examine how the German and Dutch participants evaluate the referential possibilities of the investigated masculine personal nouns. On the basis of the first task of the questionnaire, we found evidence for our hypothesis that masculine personal nouns are more frequently interpreted as gender-specific terms in German than in Dutch. We additionally found that the interpretation of the German and Dutch nouns is significantly associated with the following variables: number, lexical unit type, and relative frequency. Number was the best predictor variable in both German and Dutch, with singular nouns preferably interpreted as non-neutral and plural nouns preferably as neutral. In German, the next best predictor of interpretation was lexical unit type for both singular and plural nouns, whereas in Dutch, lexical unit type only contributed significantly for plural nouns. Relative frequency was also a relevant factor in both German and Dutch but only at a lower level. The variables definiteness and gender of the subjects did not appear to play a role in the interpretation in either German or Dutch. The results of the second task of the questionnaire were in line with the findings obtained in the first task: Dutch masculine personal nouns were more frequently re-evaluated as potentially having female reference and received better possibility ratings than their German counterparts.

In our view, our statistical analysis of a large number of experimental data constitutes an important methodological improvement of previous research. In particular, our study offers a more nuanced picture of the generic potential and actual interpretation of masculine personal nouns by demonstrating that their interpretation as either neutral or non-neutral is associated with (the interaction between) multiple variables. Regarding the German part of the experiment, our data indicate that, contrary to what is claimed in the

literature (e.g. Bußmann & Hellinger 2003 or Braun et al 2005), plural personal masculines are likely to be interpreted gender-neutrally, even more so if they are of the non-occupational type and/or have a high relative frequency. Moreover, contra Massner (2010), we found no evidence that women are more sensitive to the gender distinctions. Regarding the Dutch part of the experiment, our study provides empirical evidence in support of the tendency reported by Gerritsen (2002: 102-105) and Lutjeharms (2004: 204) that masculine personal nouns are frequently interpreted as gender-neutral terms. As a general conclusion, we can state on the basis of our survey experiments that there is a difference between the interpretation of German and Dutch personal masculines, with German nouns carrying a stronger male bias, but that this difference particularly pertains to singular nouns, not plural nouns.

Overall conclusions

1. Extrapolating the concepts of markedness and neutralisation to the field of lexicon and grammar

1.1. Trubetzkoy

In the four preceding chapters, I assumed, either implicitly or explicitly, that the concepts of markedness and neutralisation are valuable heuristic tools which enable linguists to better understand and describe the asymmetrical structure that appears to be inherent to many natural language structures. As shown in chapter one, the introduction of both concepts into theoretical linguistics goes back to the Prague School of linguistics, particularly the writings of Trubetzkoy. In discussing phonological correlations, Trubetzkoy (1939: 37) applies the terms ‘marked’ and ‘unmarked’ to phonemes standing in a privative opposition, i.e. where one member (the marked one) is characterised by the presence of a certain feature and the other member (the unmarked one) by its absence. According to Trubetzkoy (1939: 69-75), the phenomenon of neutralisation constitutes an important *distributional* diagnostic of the markedness relationship between correlative phonemes. He argues that the occurrence of one of the units in the position of neutralisation to the exclusion of the other is indicative of unmarked phonemic status (e.g. the occurrence of unmarked plosives in word-final position in German, Dutch, and Russian). At the same time, Trubetzkoy (1939: 71) emphasises that in the neutralising position the unmarked phoneme represents the ‘archiphoneme’, i.e. a unit that abstracts away from the difference between the marked and the unmarked term. The introduction of the archiphoneme as a separate phonological entity is based on the observation that in neutralisation contexts the functionality of a phonological opposition is rendered inoperable: the marked term does not normally occur in the position of neutralisation and, if it does, it no longer has a distinctive function (e.g. in German, whether one pronounces *Land* ‘land’ as [lant] or [land] does not alter the meaning of the word). Consequently, the unit that is used in the neutralising position bears a phonetic resemblance to the unmarked term, yet it actualises

only the features that are shared by the marked and unmarked term and, hence, can be analysed as including both terms of the opposition at the same time (for a recent discussion of Trubetzkoy's typology of phonological oppositions and neutralisation, see Silverman 2012: 42-52). Trubetzkoy's definition of markedness is based on the intrinsic content or complexity of linguistic units (presence vs. absence of a feature, the "ideational content" (Russ. *idejnoe sodержanie*) in Trubetzkoy's words, cf. Andersen 1989: 21)¹. Moreover, markedness is considered to be theoretically prior to neutralisation, viz. markedness is an intrinsic property of certain phonological oppositions, whereas neutralisation is only a syntagmatic manifestation, or instantiation, of markedness.

1.2. Jakobson's "markedness theory" and Coseriu's "neutralisation theory": two different theoretical approaches

Trubetzkoy's idea that linguistic oppositions often take the form of an opposition between marked and unmarked has been in particular adopted by Jakobson, who was the first to extend the application of markedness to the field of lexicon and grammar. For Jakobson, the basic opposition in semantics is that between a determinate (marked) term and an indeterminate (unmarked) term: the marked term indicates the presence of a specific feature (A), whereas the unmarked term is neutral, uncommitted with respect to that feature (indifference between A and non-A). Because of its inherent indeterminacy the unmarked term has the potential to indicate the absence, the presence, or the non-pertinence of the feature carried by the marked term (Waugh 1976: 92-96), accounting for its wide applicability compared to the marked term. The example *osěl/oslíca* was cited to illustrate Jakobson's notion of markedness (cf. chapter two): *oslíca* carries the feature [+female] in all of its contextual applications, in contrast, *osěl* lacks any specification for gender [Ø female]. Therefore, *osěl* can be used to refer to male donkeys and female donkeys alike, but also to the category of donkeys in general. Recall that Jakobson was only marginally concerned with "neutralisation" in the field of semantics. For Jakobson, neutralisation involves the contextually determined lack of commutation and the concomitant loss of functionality. Because lexical and grammatical units always retain their "significative" function (as opposed to phonological units which may be deprived of their "distinctive" function), Jakobson regards neutralisation as a typically phonological phenomenon with no proper counterpart in the field of semantics (Waugh 1976: 44 and 1982: 299-306).

¹ Note that later many markedness theoreticians defined markedness not in terms of "complexity" but, for example, in terms of "abnormality" (rarity in texts, rarity in the world, cross-linguistic rarity etc.) or "difficulty" (phonetic, morphological, or conceptual difficulty) (see Haspelmath 2006: 26).

However, the latter view by Jakobson was not shared by other linguists who are explicitly in favour of extending the application of markedness and neutralisation to the field of lexicon and grammar. Coseriu, for example, extrapolated the concepts of markedness and neutralisation beyond the field of phonology as well. However, unlike Trubetzkoy and Jakobson, he defined neutralisation not as a distributional phenomenon that is secondary to markedness, but as a principle essential to the paradigmatic structure of any language that can be accounted for *in terms of* markedness. As pointed out in chapter two, the difference between Coseriu's and Jakobson's conceptions of neutralisation is grounded in their diverging interpretations of neutralisation in the field of phonology: for Jakobson, phonological neutralisation is essentially about the defective distribution of the marked term and the inoperability of an otherwise functional phonological opposition. In Coseriu's view, the defining criterion of neutralisation in phonology is not the defective distribution of the marked term in certain syntagmatic contexts, but rather the inclusion of the marked term in the unmarked one, i.e. the archiphonemic value of the unit that occurs in neutralisation contexts, e.g. in word-final position in Dutch, /t/, or better still /T/ – /t/ being a representative of the archiphoneme – can be analysed as including its functional counterpart /d/. For Coseriu (1992 [1988]: 220), this inclusion is paradigmatically motivated: a neutralisable opposition takes the form of an opposition between a positive (marked) term and a negative (unmarked) term. The marked term is characterised by the presence of a feature (A), the unmarked term by the absence or the negation of that feature (non-A). Neutralisation, then, refers to the phenomenon that the difference between the marked and the unmarked term is cancelled by means of the unmarked term. Coseriu's often-mentioned example in semantics is the opposition *Tag/Nacht* 'day'/'night', to which I have devoted an entire case study in chapter three.

It follows that what is termed (semantic) markedness by Jakobson is covered under the heading of (semantic) neutralisation in Coseriu's writings. Although both notions ultimately describe the same linguistic phenomenon, they reflect different theoretical assumptions about the nature of the opposition between marked and unmarked in semantics: opposition between 'A' and 'indifference between A and non-A' (Jakobson) or opposition between 'A' and 'non-A' (Coseriu). This difference was discussed in detail in chapter two and may be schematised as follows:

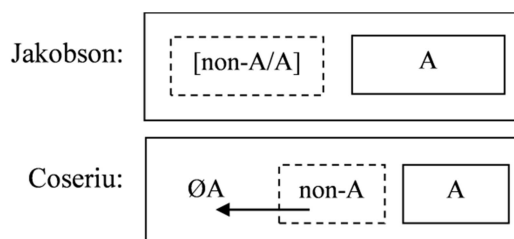


Figure 1: Jakobson's vs. Coseriu's approach to semantic markedness

These different views have important implications for the theoretical status of the neutral meaning of the unmarked term. For Jakobson, the neutral meaning is simply one of the contextual applications of the unmarked term's general meaning. For Coseriu, on the other hand, the neutral meaning is one of the *signifiés* of the unmarked term following from a neutralisation of the oppositional values of two terms constituting a functional opposition. This is a major theoretical difference. From a strictly structural-functional point of view, Jakobson's account is obviously more consistent with the structuralist premise that linguistic meanings are unitary and homogeneous (i.e. "monosemous") on the level of the language system. On this point, Coseriu's approach is much more problematic. Nevertheless, in chapters two and three I argued that Coseriu's view cannot altogether be discarded and various arguments were put forward supporting Coseriu's analysis in terms of 'bifunctionality' (alternatively called 'duosemy' by Van Der Gucht 2005: 166-167, see also below § 2.1.2):

- First, the two meanings of the unmarked term are apparently immediately accessible to native speakers. They are, so to say, co-present in the consciousness of the speaker and stored in the mental lexicon as two mutually implicating meanings ("signifiés"): the oppositional meaning implies and educes the neutral meaning and vice versa. On this view, the potentially inclusive, superordinate use of the unmarked term (e.g. *Tag* '24-hour period') serves as a diagnostic of the existence of two oppositive meanings that are part of the neutral meaning. The latter meaning is otherwise lexically distributed over two words, viz. *Tag* 'light part of a 24-hour period' and *Nacht* 'dark part of a 24-hour period'. At the same time, the negative or less explicit semantic determination of the unmarked term (e.g. *Tag* [– no sunlight]) implies a potential extension to a neutral meaning that incorporates, or abstracts away from the difference between, the oppositional values of a functional opposition.²
- Second, a neutral meaning is always a meaning that semantically includes two mutually exclusive, oppositional meanings. Jakobson's reference to a "contextual variant" does not adequately capture this fact. A contextual variant in a particular discourse context is essentially different in nature from a neutral meaning, because a contextual variant may stand in a very different kind of relationship to the underlying linguistically encoded meaning, depending on cotextual and contextual factors. For instance, the metaphoric meaning of *rain* in *a rain of tears* is not simply comparable with the neutral meaning of *day* in *to survive in the woods for three*

² This is not to say that one of the meanings may not be conceived as having priority over the other one, as shown in chapter two.

days. Consequently, contextual variants tend to be closely associated with our encyclopaedic knowledge of the world and specific discourse-pragmatic factors, whereas the neutral meaning of an unmarked term directly emerges from the paradigmatic opposition between an unmarked and a marked term. This is a strong indication that both meanings ultimately belong to speakers' language-specific semantic knowledge, unlike Jakobson's view that the oppositional and neutral meanings stand in a *langue-parole* relation to each other.

- Third, the corpus studies conducted in the chapters two and three show that both meanings of the unmarked term are very common in the corpus of texts we examined. For example, in each sample taken from COSMAS II, many clear instantiations were found of both oppositional and neutral meanings regarding all investigated lexical units. This finding might indicate that one of the meanings is not simply a contextual variant of the other, but rather that the two meanings are highly conventionalised and systematic in nature.
- And fourth, the property of neutralisation or markedness seems to be inherent to certain linguistic oppositions: some oppositions are characterised by an inclusive construal, while others are not. Thus, in German, *Student* 'student' may function as an oppositional term ('male student') or as a neutral term ('student without specification of natural gender'). By contrast, in oppositional pairs such as *Bruder/Schwester* 'brother/sister', it is not the case that one of the terms can simply be used as the neutral term. Consequently, analysing one of the meanings of the unmarked term as *only* a contextual variant may overlook the specific semantic nature of markedness oppositions in particular lexical pairs.

On the basis of these considerations, it may be more plausible to appreciate Coseriu's view that the two meanings of the unmarked term constitute two language-specific *signifiés* rather than one invariant and one variant meaning. As mentioned in chapter three, neutralisation then constitutes another exception – next to synonymy and homonymy (or homophony) – to the principle of bilaterality within structural-functional semantic theory, according to which there is an overarching one-to-one correspondence between form and meaning, in which both the form and the meaning are however schematic and highly flexible, albeit homogeneous (see Coseriu 1975, 1992 [1988]).

The different interpretations of the concepts of markedness and neutralisation outlined above can be summarised as follows: for Trubetzkoy and Jakobson, markedness is an inherent property of linguistic structure, whereas neutralisation is one of its manifestations. In contrast, in Coseriu's approach, neutralisation is an objectively existing characteristic of certain linguistic oppositions and it therefore has a similar theoretical and ontological status as markedness in Trubetzkoy's and Jakobson's approach. According to Coseriu, markedness is part of the definition of neutralisation. He draws particular

attention to the difference between the *neutralisability* of certain linguistic oppositions on the level of the language system and their actual *neutralisation* in concrete discourse (Coseriu 1992 [1988]: 220-221). This distinction reflects the more fundamental distinction between “discourse” and the “language system”, which according to Coseriu is a necessary distinction at the level of linguistic analysis, although they presuppose one another in the “theory” of language (Coseriu 1974 [1958]: 39-42). The language system consists of systemic language-specific “values” which derive their systemic functions from paradigmatic oppositions (cf. Coseriu 1992 [1988]: 201; see in particular Haßler 1991 for a critical review of the “value” concept from the 18th century to the 1980s). When a speaker uses one of the terms of an opposition as a neutral term in a certain usage context (= “actual neutralisation”), this choice is motivated by the form or structure of the underlying paradigmatic opposition, i.e. the contrast between a positively defined term and a negatively defined term. For Coseriu, the potential of one of the terms of a functional opposition to be used as a neutral term (= “neutralisability”) is grounded in the linguistic opposition itself, whereas neutralisation as the realisation of this potentiality is a matter of discourse (i.e. *parole*). However, as we will further develop below, Coseriu’s focus on the *linguistic opposition* itself to explain the neutralisability of an opposition might be too rigid, as it seems to exclude facts of extralinguistic reality to play a part in explaining neutralisation phenomena. In addition, we will see that the rejection of the language use/language system dichotomy in Cognitive Linguistics under the heading of “usage-based theory” (see Newmeyer 2003) is one reason why the notions of neutralisation and neutralisability are considered to be theoretically irrelevant from a cognitive point of view.

We also argued in chapter one that, as the term neutralisation has been applied to a variety of diverging linguistic phenomena in the field of semantics, neutralisation should be used in reference to a specific type of linguistic phenomenon, in order to prevent the term from becoming theoretically and methodologically irrelevant in linguistic inquiry. Accordingly, we defined neutralisation as the *optional or obligatory suspension of a semantic opposition between two (or more) lexical units or grammatical categories in certain syntagmatic contexts, whereby in the position of neutralisation, one of the units stands for what is common to all of the units of the opposition*. Regarding the other senses of neutralisation that we distinguished in chapter one, we suggested to use other (already existing or new) linguistic terms.

1.3. Coseriu’s neutralisation theory and “structural-functional” linguistics

It is Coseriu’s conception of neutralisation and markedness that has served as the starting point for the chapters of this dissertation. The choice to build on Coseriu’s account of

neutralisability and markedness is based on my personal view that Coseriu's both "structural" and "functional" approach to language contains various theoretical assumptions that are fundamental to a both epistemologically consistent and historiographically informed theory of language which remains foundational for any linguistic research – e.g. the notions of opposition, functionality and systematicity, the distinction between linguistic meaning proper and contextual meaning, the role of "norms" in language and the distinction between language competence (*dynamis*), the creation of language (*energeia*) and the products of speech (*ergon*). Moreover, Coseriu addresses – rightly, to my mind – the concept of neutralisation as central to the issues of the structure of language. Thus, a German noun such as *Arzt* 'doctor, physician' was described as having two structurally motivated *signifiés*: an oppositional one that is used in contexts where *Arzt* 'male doctor' contrasts with *Ärztin* 'female doctor' and a neutral one that is used in neutralisation contexts (where *Arzt* takes on the sense of 'doctor in general, i.e. 'doctor regardless of gender'). It should be noted, however, that the general, received understanding of the concepts of markedness and neutralisation is the one held by Jakobson, which is mainly perpetuated in the work of Greenberg 2005 [1966], Battistella 1990, 1996, Andersen 1989, 2001, 2008, Croft 1990, Givón 1990, among others). In contrast, Coseriu's approach has been mainly adopted by linguists working within the structural-functional paradigm (e.g. Geckeler 1971a, 1971b, 1971c, Klein 1981, Staib 1985: 145-158, Dietrich 1995: 141-149, Timmermann 2007, among others). Outside the structural-functional framework it has not found wide resonance. Although Coseriu's neutralisation theory differs from Jakobson's markedness theory with respect to the assumed relationship between marked and unmarked structures in semantics, both theories try to account for the asymmetry inherent in numerous linguistic contrasts from a "structuralist" point of view.

2. Coseriu's neutralisation theory: a critical review

Ever since the introduction of the concepts of markedness and neutralisation into phonology and their extension to other domains of linguistic inquiry, many linguists have questioned their significance as explanatory concepts. The general tenet of the criticism has been that markedness and neutralisation do not explain anything, but, rather, are themselves in need of explanation. It should be noted that most of the criticisms have been directed to the concept of markedness and that the concept of neutralisation, particularly in the interpretation advocated by Coseriu, has received much less attention. This is probably due to the fact that many linguists are not well acquainted with Coseriu's work in general and his neutralisation theory in particular (for accounts of the reception of

Coseriu's work, see Kabatek/Murguía 1997: 233-244 and Willems 2003: 16-17, and compare López-Serena 2009: 639-647, Riemer 2009: 657, Zlatev 2011: 126, Itkonen 2011, among others). However, given that Coseriu's concept of neutralisation is, like markedness, defined as a basic principle of linguistic structure with descriptive and explanatory potential, the "anti-markedness argumentation" which appeared in the literature is relevant to Coseriu's concept of neutralisation as well.

In the following section, I will first give a brief overview of the major alternative analyses proposed in the "anti-markedness" literature. Subsequently, I will review Coseriu's neutralisation theory with a critical mindset, taking into account some relevant insights from these alternative approaches and drawing on important conclusions obtained from the case studies discussed in the previous chapters. To conclude, I will sketch a revised account of semantic neutralisation/markedness in the lexicon.³

2.1. Alternative analyses

The theoretical utility of the concepts of markedness and/or neutralisation has been addressed in detail in Murphy (1994), Janda (1996) and Haspelmath (2006). Other discussions are scattered in the literature and often limited to some brief remarks. The ensuing discussion will deliberately centre around the notions of markedness and neutralisation in the field of *semantics* and the phenomena associated with these notions. The various lines of argumentation may generally be subdivided into three broad categories, according to the kind of analysis proposed:

- The phenomena that are normally discussed under the heading of markedness are considered too diverse to be adequately explained in terms of a single type of relation (viz., marked/unmarked). Instead, the data are claimed to be predictable from the meaning of words, extralinguistic knowledge or pragmatic principles. Physical facts and cultural knowledge are seen as the most important motivating factors behind linguistic asymmetries. This view is advocated by Murphy (1994: 277-285 and 2003: 184-188). An even more radical version of this hypothesis holds that markedness properties can ultimately be replaced by naturalness values based on speakers' interaction with the world and properties that "prototypical speakers"

³ In the remainder of this concluding part, I will occasionally speak of "markedness oppositions" or "linguistic markedness" in reference to what Coseriu usually calls "neutralisable oppositions" or "(linguistic) neutralisation". Although there is, strictly speaking, a theoretical difference, as clarified in § 1.2, between Jakobson's "markedness" theory and Coseriu's "neutralisation" theory as far as the definition of *unmarked* in semantics is concerned, Coseriu, like Jakobson, also makes use of the notions of "markedness", "marked" and "unmarked" when describing "neutralisation" phenomena.

display (cf. Mayerthaler 1981, van Langendonck 1984, Dressler et al. 1987 and Dressler 1985 and 2006).

- The major theoretical assumptions of Cognitive Linguistics (henceforth: CL) are the basis of a unified theory of linguistics in which markedness phenomena can be described as emerging from the way in which linguistic knowledge is structured. This view is taken by Janda (1996: 208). It resembles the position taken by Murphy (1994 and 2003) in that markedness is best accounted for in terms of properties of people, the world, or people's conception of the world. However, the framework within which the argument is developed is more firmly rooted in the tradition of CL theory. For example, to explain markedness phenomena, more emphasis is put on the theoretical constructs of CL such as the radial category, the idealised cognitive model (ICM), the basic level, metaphorical mapping or prototype effects (cf. Lakoff 1987, Geeraerts 2010, among others). Importantly, CL does not maintain the distinction between linguistic meaning proper and encyclopaedic knowledge (cf. Coseriu 2000 [1990], Willems 2011: 1-50; 2012: 665-681). By contrast, this distinction is still maintained in Murphy's approach. (§ 2.1.1).
- The observed structural asymmetries are occasionally accounted for in terms of frequency asymmetries. Apart from frequency of use, other substantive factors such as phonetic difficulty or generalised conversational implicatures, are considered to be more helpful in understanding the asymmetrical patterns. Hence, the concept of markedness has no explanatory added value and can altogether be dispensed with. This position is adopted by Haspelmath (2006) (see also Givón 1990, Croft 1990, Fenk-Oczlon 1991, Bybee 2010 and compare Andersen 2001: 50, among others).

2.1.1. The inherent semantic structure of words, extralinguistic knowledge and experiential factors

In her critique on markedness, Murphy (1994: 277-285, 2003: 184-188 and 2010: 236-237) questions the claim that the differences in the distribution of members of an antonym pair can be accounted for in terms of markedness. As an alternative to markedness theory, she proposes, on the one hand, to look for semantic reasons to account for differences in distributional patterns, i.e. to what extent can the *meaning* of adjectives explain why they can or cannot occur in certain syntactic/semantic contexts? Building on Van Langendonck (1984), Murphy additionally argues that extralinguistic, experiential factors may affect the distribution of adjectives as well. On this view, a central question is how *extralinguistic knowledge* and *facts about human interaction with the world* (perceptual capabilities, social/cultural rules, beliefs) can account for the unequal distribution of members of an adjectival pair. Two examples are discussed below. First, Murphy (1994: 285) observes

that the (a)-sentences in (1) and (2) are acceptable for both *tall* and *short*, whereas the (b)- and (c)-sentences do not occur with *short* (see Murphy 2003:186-187 and 2010: 236-237 for a similar example and argumentation).⁴

- (1) a. The Empire State Building is tall.
b. The Empire State Building is 102 stories tall.
c. How tall is the building?
- (2) a. My house is short.
b. #My house is three stories short.
c. #How short is your house?

In her view, the (a)-sentences are entirely acceptable, as they simply involve a comparison to a neutral point, say, the average height of buildings (one building is taller than the neutral point, while the other is shorter than it). The (b)- and (c)-sentences, however, entail a comparison between the height of the building or house and the beginning of the measurement scale (i.e. zero), which is why (1b) and (1c) are acceptable but not (2b) and (2c). Murphy (1994: 12) argues as follows (see also Murphy: 2003: 186 and 2010: 236-237):

We cannot measure buildings negatively, since there is no salient starting point for measuring the vertical space that a building does not take up versus the vertical space that it does fill.

Thus, it is our *knowledge of measuring* that prevents us from using *short* in measure phrases and *how*-questions, according to Murphy. Remarkably, in Murphy (2003: 187), this *conceptual knowledge* is described as being part of the “semantic structure” of the words *tall* and *short*, leading Murphy to conclude that it is “the meaning” of these words that accounts for the differences in distribution.

The line of reasoning applied to the *tall/short* example is also used in explaining the distribution of the adjectives *warm* and *cool* (Murphy 1994: 285). Consider examples (3) and (4):

- (3) a. The soup is warm.
b. #The soup is 80° warm.
c. How warm is the soup?
- (4) a. The cocoa is cool.
b. #The cocoa is 50° cool.
c. How cool is the cocoa?

⁴ As Murphy herself does not explain what the symbol # exactly means, it is not entirely clear whether it means “ungrammatical” or simply “odd, less acceptable”.

According to Murphy (1994: 286), neither *warm* nor *cool* can be used in a measure phrase (b-sentences) because there is no “starting point” in the temperature scale. Absolute zero might be a possible candidate for a starting point, but, the argument goes, as nobody has ever felt absolute zero, it is not perceptually salient. Thus, it is again our knowledge of measuring as well as our perceptual limitations that explain the abnormality of measure phrases with temperature adjectives. The absence of a (salient) starting point also accounts for the fact that the *how*-questions (c-sentences) with *warm* and *cool* are not evaluated as neutral, but as committed questions, which renders them fully acceptable (Murphy 1994: 286).

With her conclusion regarding the *tall/short* example, Murphy clearly conflates the level of encyclopaedic knowledge associated with (the use of) words such as *tall* and *short*, on the one hand, and knowledge of their linguistic meaning proper, on the other hand. The encyclopaedic knowledge entails, e.g. the fact that a measurement of height cannot start off from the end of a height scale, because there simply is no “end” on that side of the scale. However, this is non-linguistic, universal knowledge of the world, which has nothing to do with the English language. In contrast, the knowledge of the linguistic meanings of *tall* and *short* is language-specific, more specifically knowledge of the paradigmatic opposition between both words in the English lexicon. Because of this conflation of two kinds of knowledge, Murphy’s claim that the *tall/short* example above demonstrates that the distributional differences between both adjectives has a lexical-semantic basis rather than being grounded in a markedness relationship as a feature inherent to the lexical opposition of English *tall* and *short*, is unconvincing. Murphy’s conclusion is all the more remarkable, as she still does seem to adopt the view that a distinction between linguistic meaning and encyclopaedic knowledge is relevant to linguistic inquiry.

Another objection against Murphy’s account is a methodological one. Methodologically, the principal weakness of her account is that it is entirely based on introspection, with no empirical data (either naturally occurring utterances or psycholinguistically elicited findings) being adduced. The acceptability of some of Murphy’s example sentences is clearly debatable, e.g. (2a) *My house is short*. Moreover, whereas the phrase *x degrees warm* is indeed hardly acceptable in English, the equivalent phrase in Dutch, viz. *x graden warm*, is quite common. Apparently, the combination of an expression referring to a temperature degree (especially high temperatures) with the adjective *warm* shows a high degree of idiomaticity in the Dutch language system, but not so in English. Notice that it is idiomatically in English to say, e.g. *It’s about twenty four degrees* (BNC, KC2 5676), but definitely not *It’s about twenty four degrees warm*. Idiomatic differences between English and Dutch such as these run counter to Murphy’s argumentation, which does not pay due attention to language-specific differences. Consequently, when Murphy argues that the “semantics” of the words *tall* and *short* explains their distributional characteristics, she actually mixes up the meaning of these words with the idiomatic

restrictions that exist in the English language regarding the use of these words in measure phrases, viz. the fact that the combination “X degrees + warm” is uncommon in English (whereas it is more common, e.g. in Dutch).

A final moot point concerns the extent to which the conceptual representations (e.g. the representation of the height scale with a zero point at the *short* end of the scale extending indefinitely in the *tall* direction) and pragmatic factors (e.g. the fact that things cannot be measured “negatively”) referred to above can appropriately address the most fundamental question in this discussion, viz. how it can be explained that *tall* may potentially include its semantic counterpart *short* in certain types of context, but not vice versa. Recall that Murphy regards the examples she discusses as *distribution* phenomena, viz. as distributional asymmetries between the members of adjective pairs. This explains why she is only concerned with finding an alternative explanation for the skewed distribution of certain adjectives, e.g. the fact that *tall* can occur in a wider range of contexts than *short*. As outlined above, Murphy takes non-linguistic (language-external) factors (e.g. encyclopaedic knowledge, human perceptual capabilities, etc.) to be at the basis of these distributional asymmetries⁵ and, accordingly, argues that the concept of markedness is unnecessary in constructing explanatory models of linguistic meaning. It bears pointing out that, in shifting the focus from the concept of markedness to that of asymmetrical/defective distribution of words such as *short* in relation to *tall*, Murphy takes insufficient notice of the potential of one the terms of adjective pairs to be used as a semantically neutral term, viz. the fact that *tall* in a sentence such as *How tall is the building?* is used with a semantically neutral value including the value of its counterpart *short*. Importantly, in neutralisation and semantic markedness theory, it is exactly this *semantic* asymmetry, rather than *distributional* asymmetry, that has theoretical priority, and understandably so: if there are differences in distribution (distributional markedness) between the members of an oppositional pair, then these differences have to be explained against the backdrop of semantic markedness (cf. Andersen 1989: 14).

In summary, whereas Murphy focuses on distributional asymmetries, markedness/neutralisation theory is primarily concerned with semantic asymmetries and the conclusion must be that Murphy’s criticism does not address the central concern of markedness/neutralisation theory. Murphy suggests to abandon the concept of markedness and to replace it with explanations in terms of more “substantive”, non-linguistic factors such as world knowledge, social knowledge or human perceptual properties. As I will also argue in § 2.2.2, these facts may well affect the occurrence or non-occurrence of *tall* and

⁵ As mentioned previously, Murphy (1994, 2003) herself claims that some examples (e.g. *How tall is the building?* vs. **How short is your house?*) can be explained by the “meaning” of the words *tall* and *short* (i.e. linguistic motivation). I showed, however, that her concept of “meaning” also includes encyclopaedic facts such as knowledge about measuring things.

short in certain contexts, e.g. our knowledge of measuring may motivate why *tall* – and not *short* – is most commonly and most frequently used in measure phrases or *how*-questions. However, it is not clear to what extent such facts can be helpful to answer the more fundamental question why *tall* has the potential to be used as an inclusive term semantically encompassing both *tall* and *short* (as exemplified in sentences 1(b-c), where it simply denotes the dimension of height), whereas *short* does not have this potential. It is this latter question that is accounted for in neutralisation/markedness theory, viz. by representing markedness as a property typical of certain oppositions.

2.1.2. Cognitive Linguistics, prototype theory and polysemy

The idea that markedness phenomena should be explained by drawing on the theoretical underpinnings of CL has been explicitly addressed by Janda (1996). One of the basic tenets of CL is that linguistic information is structured in radial categories with increasingly peripheral members related to a central prototype. According to Janda (1996: 209), markedness is a necessary result of the structure of cognitive categories, in that the assignment of markedness values is directly informed by the distance of elements from the prototype: the further away from the prototype, the more marked an element is. Within a cognitive semantics framework, the determination of the prototype is dependent on ICMs (Idealised Cognitive Models). ICMs are structured sets of beliefs and expectations that direct cognitive processing and shape the internal structure of categories (cf. Geeraerts 2010: 222-225): what is expected on the basis of a particular model of encyclopaedic knowledge, is prototypical and, hence, unmarked. Janda (1996: 228) concludes by saying that, from the point of view of CL, markedness is a “natural by-product” of the prototype-based categorisation of linguistic knowledge.

It is frustrating that Janda does not enter into a detailed discussion of how the topic of semantic asymmetry, which figured so prominently in the literature on markedness, should be alternatively analysed within a CL approach to meaning. At one point, Janda (1996: 209) claims that “the internal structure of the category [...] provides inclusive asymmetrical relationships”. However, a clear explanation of how CL can adequately account for the fact that one of the terms of a lexical or grammatical contrast may also be the neutral, inclusive one (e.g. *day* as ‘24-hour period’, *masculine* as ‘person regardless of gender’, *long* as ‘having a certain length’, etc.) is not provided. Unfortunately, the argumentation remains vague and is not illustrated with examples. Unclear formulations such as “the relations are inclusive because they incorporate the elements into a single category” or “they [i.e. the relations] are all asymmetrical with respect to the center vs. periphery of the structure of the category” (Janda 1996: 209) are arguably not very helpful for a better understanding of the ramifications of CL with respect to markedness.

The idea that markedness phenomena are better explained in terms of the key concepts of CL (in particular, prototype effects and polysemy) is also explicit Lakoff (1987), Taylor (1999) and Cruse (2011). Lakoff (1987: 61), for example, argues that

[...] markedness is a term used by linguists to describe a kind of prototype effect – an asymmetry in a category, where one member or subcategory is taken to be somehow more basic than the other (or others).

Tallness, for instance, is “cognitively more basic” than shortness. The asymmetry of the opposition *tall/short*, with the word marking the “cognitively basic dimension” occurring in neutral contexts, is therefore a side-effect of the cognitive categorisation of linguistic structures into prototypical (*tall*) and less prototypical (*short*) members (Lakoff 1987: 60-61 – see also Janda 1996, Taylor 1999, Geeraerts 2010, Cruse 2011, among others). Taylor (1999) focuses on some basic theoretical differences between Structural Semantics, as represented by Coseriu (e.g. 1977, 1990), and Cognitive Semantics, as developed in the work of Langacker (1987, 1991), Lakoff (1987), Talmy (1988), and Geeraerts (1985, 1997). In a short passage commenting on Coseriu’s notion of neutralisation, Taylor (1999: 30) downplays the importance of semantic neutralisation along the lines of Coseriu’s account, arguing instead that it is a multifaceted phenomenon which cannot be accounted for in terms of a single mechanism. Taylor accordingly proposes different alternative analyses for a number of Coseriu’s examples. The case of Spanish *hermanos*, which can have a meaning that is not simply the plural of *hermano*, is an instance of *established polysemy*; the gender-neutral use of English *he* reveals a *conceptual bias* in which “male” is the default value for human beings (“females simply do not count” – Taylor 1999: 30). The generic potential of masculines thus has a clear extralinguistic motivation and is not just “a fact about the language system” (Taylor 1999: 30). On the other hand, the use of *day* to cover a day and a night represents a case of *metonymy*, according to Taylor (1999: 30): the 24-hour period is simply named after its most salient component, i.e. the light of day. On this view, no particular meaning selection in the sense of neutralisation takes place when *day* is used in either sense.

Cruse (2011: 115-116, see also Brugman 1997: 4-5) treats instances of semantic inclusion as a special case of *polysemy*, viz. *autohyponymy*. Cruse mentions *dog* and *cat* as examples of *autohyponymy*: *dog* has a default general sense (i.e. the preferred reading in the absence of contextual clues) which is “member of canine race”, and a contextually restricted sense “male member of canine race”.⁶ In the case of *cat*, on the other hand, the

⁶ See, however, Geeraerts (1993: 237-239), who argues that various types of tests used to distinguish between lexical polysemy and vagueness (i.e. the logical, linguistic and definitional test) may yield mutually contradictory results, as exemplified by the word *dog*. According to the logical test, an item is polysemous if it can simultaneously be true and false of the same referent. Applying this test to the *dog* example (e.g. *Lady is a dog alright, but she’s not a dog*), it turns out that *dog* is polysemous (Geeraerts 1993: 237). However, the definitional test rather points to the semantic vagueness of *dog*. According to this test, “an item has more than one meaning if there is no minimally specific definition covering the extension of the item as a whole, and [...] it has no more lexical meanings than there are maximally general definitions necessary to describe its extension” (Geeraerts 1993: 230). Since the male reading of *dog* is always a subset of the superordinate reading, “no definition of that subset could ever claim the maximal generality” that is required for polysemy

specific reading is the default sense, whereas the general sense requires some contextual pressure. Why the default readings of *dog* and *cat* are different is not clear, and based on my own intuition, I would not concur with Cruse's analysis of *cat*. The former type of autohyponymy (general sense → restricted sense) Cruse calls *downwards autohyponymy*, while the latter type (restricted sense → general sense) is called *upwards autohyponymy* (Cruse 2011: 116).⁷ However, Cruse does not adduce any empirical evidence to support his claim.

Although the polysemy approach might be a satisfactory alternative from a CL point of view, I concur with the view expressed by Lyons (1977: 308) that the bifunctionality inherent to lexical units such as *day*, *dog* or *cat* should not be treated as an instance of polysemy, but is a direct consequence of semantic markedness. Apart from being difficult to reconcile with my own theoretical assumptions about linguistic semantics, analysing these words as polysemous does not explain anything, but would merely constitute an alternative descriptive way of saying that they have “various meanings”. In my view, the markedness-theoretical approach adopted by Coseriu, Lyons and others has the great merit of trying to relate the multiple attestations of semantic inclusion to an “over-arching” linguistic principle that can be found on many different levels of language, ranging from phonology to the lexicon and syntax (Coseriu 1985: xxxiv-xxxv).⁸ To be sure, by rejecting the polysemy approach, I am not denying the linguistic reality of both meanings of the unmarked term, nor the inherent dynamic flexibility and interpretative malleability of systemic meanings (see Willems 2011: 18-19). However, besides recording the two meanings as empirical facts, the markedness-theoretical approach also considers these meanings to be motivated by an underlying principle of linguistic hierarchisation which is part of speakers' linguistic competence, a viewpoint also expressed by Coseriu (1992 [1988]: 220) in relation to the principle of neutralisation:

Bei der Neutralisierung aber berücksichtigt der Strukturalismus diese Vielfalt nicht nur, sondern “sieht sie voraus” (d.h. rechnet von vornherein mit ihr); und er beschränkt sich nicht nur darauf, sie als empirischen Sachverhalt festzustellen, sondern begründet sie rational durch ein funktionelles Prinzip.

In the case of neutralisation, however, structuralism does not only account for this diversity, it also “anticipates” on it (i.e. takes it *a priori* into consideration); and it

and, thus, following this test, *dog* is not polysemous, but rather “vague” or “unspecified” as to the difference between the male and superordinate reading.

⁷ In Cruse (2000: 111), this type was termed *autosuperordination*.

⁸ Coseriu (1985) argues that neutralisation can also be observed at a discourse-pragmatic level (“foreigner talk”). However, as discussed in chapter one, this type of “neutralisation” is arguably better analysed with reference to the conversational maxims introduced by Grice (1975, 1978).

does not restrict itself to recording the diversity as an empirical fact, it also motivates the diversity by a functional principle.

In the preceding chapters (particularly chapter three), various arguments were levelled against an analysis of markedness in terms of polysemy. They are briefly repeated below:

- (a) First, the notion of polysemy is traditionally used to refer to a set of meanings that are associated with a single linguistic unit. Using the term polysemy to describe the unmarked term's bifunctionality is thus not entirely consistent with the structural-functional premise that the meaning of any one lexical item is essentially *relational* in nature in the sense that, e.g. the two meanings of *day* are not atomistic entities, but they are grounded in linguistic structure through the paradigmatic opposition of *day* in the English lexicon to its counterpart *night*. The two meanings of *day* are, to use Coseriu's words, "motivated by a functional principle" ("begründet [...] durch ein funktionelles Prinzip"): the principle of opposition and a further characterisation of opposition, viz. the hierarchical relation between the unmarked term *day* and the marked term *night*. If one subsumes the semantic bifunctionality of *day* simply under the heading of polysemy, then one fails to acknowledge the relational nature of the oppositional and neutral meaning of *day*.
- (b) Second, the claim that words such as *day* are polysemous implies putting them on a par with 'polysemous' words such as *sea* 1. 'large body of salt water', 2. 'a great mass, an abundance' (as in *a sea of flowers*). Van Santen (2003: 14-15) describes the words *day* and *sea* as being alike in having both a 'narrow sense' and a 'broader sense'. However, it is clear from the usages of *sea* and the usages of *day* that these two words are semantically entirely different. Whereas the second meaning of *sea* is in a metaphoric relationship to the first one (which may be a strongly conventionalised one, or an instance of "normal language use" in Coseriu's parlance), the neutral meaning of *day* ('24-hour period') is not some "broad sense" that can be associated with the basic meaning of *day*, but a hierarchical meaning that semantically incorporates *the oppositional values* of the underlying paradigmatic opposition between *day* and *night* in a fixed, systemic way. It is this specific nature of the neutral meaning that sets the type of 'multifunctionality' typical of markedness oppositions apart from the type of 'multifunctionality' usually covered by the term "polysemy". Moreover, in the case of semantic markedness, the point of discussion is always focused on two meanings, no more and no less, whereas the term polysemy is applied to words usually having more than two meanings (and in case of a word such as *over* up to 24 according to authors such as Lakoff 1987 and Brugman 1981 [1988], among others).
- (c) And third, the observation that the relation of inclusion is recurrent across various levels of language (i.e. at the level of phonology, lexicon and grammar) and appears to be a widespread phenomenon among the world's languages, suggests

that the bifunctionality of a lexical unit such as *day* is not just an isolated fact, but is rather indicative of an underlying mechanism or principle that is typical of natural language. The notion of polysemy arguably does not adequately capture the pervasive and systematic nature of the specific semantic relation that holds between members of inclusive linguistic contrasts.

As an alternative to the term polysemy, the term “duosemy” was introduced by Van Der Gucht (2005: 166-167), which was adopted in chapter three. Recall that the term duosemy was used specifically in relation to markedness oppositions, more particularly to refer to the two (and only two) structurally motivated meanings (the specific, oppositional one and the neutral, generic one). Note, however, that like polysemy, duosemy is only a label for a specific linguistic phenomenon (see also chapter three). The actual *explanans* of this phenomenon is the underlying principle of semantic markedness. Yet, from a structural-functional perspective, it may be justifiable to adopt the term duosemy, not only as a strong case against a rampant polysemy approach to the kind of meaning that is involved in markedness and neutralisation, but also to emphasise the inappropriateness of the term polysemy to describe the unmarked term’s bifunctionality.

2.1.3. Frequency

Haspelmath (2006: 29) argues that the phenomena that are traditionally discussed under the heading of ‘semantic markedness’ are better described using standard semantic concepts such as hyponymy and polysemy, and that generalised conversational implicatures and their conventionalisation are crucial for understanding the observed asymmetries. For example, Haspelmath suggests that the specific meaning of *lion* (‘male lion’) once was a situationally conditioned implicature, to be differentiated from its general meaning ‘lion regardless of gender’.⁹ According to Haspelmath (2006: 51), however, this implicature has become so common that it is reanalysed as being part of the semantic content of *lion*. In Haspelmath’s view (2006: 52), *lion* is characterised by “incipient conventionalisation”. Other nouns might exhibit “full conventionalisation” (I assume that for these latter nouns Haspelmath would accept an analysis in terms of polysemy, although he is not clear on this point). Haspelmath points out that for lexical pairs that show some degree of conventionalisation, the notion of markedness might seem appropriate. However, as different pairs of terms often behave differently with respect to various potential markedness criteria, the notions of ‘marked’ and ‘unmarked’ are not very helpful, Haspelmath (2006: 53) argues, in explaining the divergent patterns. In many

⁹ A similar view is held by Becker (2008) with regard to masculine personal nouns in German (e.g. *der Student*). According to Becker, the male reading of these nouns is a conversational implicature (triggered by discourse-pragmatic factors such as textual relevance, the presence or absence of alternative formulations, etc. – Becker 2008: 69), while the generic reading is the unique lexical meaning of these nouns.

cases, frequency of use is a much more important factor to account for the asymmetries. The finding, for instance, that one can say *That dog is a bitch* or *A bitch is a particular kind of dog*, whereas utterances such as *That queen is a king* or *A queen is a particular kind of king* are hardly acceptable or unacceptable, can be immediately predicted by frequency of use, according to Haspelmath (2006: 53):

in the pair *dog/bitch*, *bitch* has a much lower proportional frequency than *queen* has in the pair *king/queen*, so it is not surprising that it behaves more like a hyponym of *dog*.

Frequency is considered to be a decisive factor in explaining the wider distribution of lexical units such as *lion*, *cow*, and *dog* (relative to their respective counterparts) as well (Haspelmath 2006: 54):

the wider distribution of terms like *lion*, *cow*, *dog* is not in the first instance due to their greater frequency – rather, it is due to their wider meaning, which is itself ultimately due to the lower frequency of the opposite meaning.

Haspelmath's reasoning in the above quotation is unconvincing. First, if the (lower) frequency of the marked term can be regarded as the ultimate *explanans* of the unmarked term's wider distribution, why, then, does the (higher) frequency of the unmarked term not lie at the basis of the difference in distribution? Second, and more importantly, it is unclear how and why the lower frequency of the marked term, which is a phenomenon of actual usage (i.e. a *parole* phenomenon), has explanatory precedence over a speaker's internalised knowledge of linguistic relationships and their structure? That is to say, the lower frequency of the marked term begs the question of how it comes about that it is less frequent than the unmarked term.

Haspelmath's suggestion that markedness should be primarily replaced with explanations in terms of frequency of use runs the risk of putting the card before the horse. I will not enter into a detailed discussion of why frequency is in itself not a good candidate as the sole predictor of markedness (for relevant literature on this topic, I refer to Schwartz 1980, Anderson 1989, Battistella 1990, and Sobkowiak 1997). But recall that I conceive of markedness as being in principle independent of frequency of use (see chapter two). Of course, there may well be a correlation between the markedness values ascribed to the members of a linguistic contrast and differences in frequency of use. However, if such a correlation exists, I hold the view that frequency is motivated by markedness, not vice versa, bearing in mind that frequency in itself is no functional ("cognitive") explanation (see Haiman 2008: 36). In other words, although frequency of use may be a useful indicator of markedness values, the evaluation of linguistic oppositions in terms of markedness has precedence over frequency of use in explaining the observed asymmetries between one linguistic item and its direct opposite.

2.2. Problematic issues in Coseriu's neutralisation theory

As has become clear in the previous chapters, I believe that the notions of (semantic) neutralisation and markedness remain, despite the criticism leveled against them from various points of view, useful notions in a coherent analysis of the phenomena I have been investigating. I also believe that Coseriu's neutralisation theory is a good starting point to account for the asymmetry observed in numerous linguistic contrasts. At the same time, however, Coseriu's neutralisation theory is flawed with respect to a number of issues. The question in which I am interested here is whether alternative accounts (as discussed above), on the one hand, and conclusions drawn from the case studies presented in previous chapters, on the other, can provide us with clues to overcome these flaws.

2.2.1. The *source* of neutralisation

A first problematic issue in Coseriu's account concerns the *source* of the asymmetrical relation between marked and unmarked opposites, viz. the question of where speakers' *intuitive* grasp of markedness (or neutralisation) comes from. This issue is insufficiently addressed in Coseriu's writings. Neutralisation is discussed as a property inherent to lexical and grammatical oppositions, i.e. it is treated as directly arising from the lexicon and grammar of a particular language system. Coseriu's "immanent" perspective, with its strict focus on language-internal contrasts, surely is primarily informed by a methodological priority, viz. that language has its own specific nature and, therefore, must be studied in such a way that its integrity be maintained in the analysis – recall the importance Coseriu (1992 [1988]: 138) attributes to the observation that "der Strukturalismus ist [...] immanent" (cf. also Waugh 1976: 14). This entails, first and foremost, that principles or constructs from other domains of study, in particular psychology, logic, biology, etc., should not be imposed on the analysis of language understood as a creative, "free" activity (Coseriu 1974 [1958]: 39). However, in the preceding chapters I have shown that Coseriu's linguistic perspective has to be broadened if we are to achieve a comprehensive understanding of the issues at stake. In particular, a broader cognitive perspective is necessary to establish why asymmetrical relations are apparently characteristic of many languages and can be observed at different levels of language. The usefulness of a broader cognitive perspective in relation to markedness has already been briefly discussed in Andersen (2001: 45-47), who states that

[...] markedness arises in the initial cognition of any and all distinctions thanks to the inherently asymmetrical, inclusive relation that obtains between any concept that is formed (M) and the conceptual space that surrounds it (U).

A cognitive account of markedness has also been prompted by linguists adhering to a cognitive theory of language, particularly within the cognitive model interpretation of prototype effects (see above, § 2.1.2). Although I do not subscribe to a prototype-

theoretical account of neutralisation phenomena, the cognitive perspective developed within this framework has certainly been useful in drawing the attention to the importance of non-linguistic facts to better understand the mechanism behind neutralisation phenomena.

I hypothesise that neutralisation phenomena observed in one language after another are linguistic instantiations of a general mental or cognitive faculty of the human mind, viz. to take one member of a category either as the opposite member to the other member of that category or as the representative of the category as a whole. This peculiarity ultimately pertains to human thinking and is reflected in non-linguistic systems as well. If we take a look at, for example, cultural systems, we encounter numerous relations that are construed as “inclusive” oppositions. Consider, for instance, the following example cited by Waugh (1982: 309) with respect to American culture: *black (person)* vs. *white (person)*.

[...] a “white person” is used to stand for any individual in the culture or for some subgroup within the culture not defined in terms of race [...]. A “black person” is normally seen as standing for the black community only, and rarely for the culture as a whole. It is only very recently, for example, that advertisements using blacks are meant to reach both blacks and whites equally.

Another example Waugh gives is that of *left-handedness* vs. *right-handedness*. As Waugh (1982: 314) argues, American culture (as probably many others as well) is a right-handed culture, where right-handedness is “normal” (or “unmarked”) and left-handedness is the “special” case. As a result, the terms *right-handedness* and *handedness* are often used interchangeably, to the extent that a right-handed person may be seen as a representative of “all (handed) people” (similar ideas are also found in Lévi-Strauss 1963 and Needham 1973).¹⁰

Thus, the point I would like to make is that both in linguistic and non-linguistic systems numerous oppositions evidence the human tendency to construe seemingly exclusive oppositions as inclusive ones, where one term may be extended to function as a cover term. Psychological evidence for the human faculty I refer to can be found in an experiment by Meltzoff (1995: 838-850). In this experiment, it was investigated whether children aged 18 months would re-enact what an adult actually did or what an adult intended to do. The aim of the experiment was to find out whether children at this age are already able to attribute mental states such as beliefs, desires, emotions and intentions to adults and whether this understanding leads them to imitate or fulfill the action performed by the adult. In one of the experiments, children were confronted with an adult who

¹⁰ As Waugh (1982: 314) points out, this difference is reflected in language as well: right-handed scissors are simply called *scissors*, while left-handed scissors are called *left-handed scissors*. Or, anyone who is left-handed would have to buy a *left-handed guitar* or a *lefty*, whereas a “regular guitar” is not normally called a “righty”.

demonstrated the “intention” to raise a loop up to a prong and place the loop over it. Importantly, the adult tried, but deliberately failed to perform the act. The results showed that children could infer the adult’s intended act by watching the failed attempts (Meltzoff 1995: 842-843). Interestingly, in a second experiment, the same actions were carried out by an inanimate object (a mechanical device). This time the observation of the failed action did not lead the children to produce the target acts. Apart from showing children’s attentiveness to non-linguistic goals at a very early stage (Clark 2005: 580), this finding indicates children’s capacity to construe an adult person performing a certain action not only as an “other”, but also as a “representative” of someone of their own kind. To put it in markedness-theoretical terms, children can evaluate the adult person not only as ‘not-A’ (an adult person as opposed to a child), but also as ‘not-A+A’ (an adult person standing for a human individual in general). The experiment thus shows that the inclusive construal observed in language, and the level of abstraction this construal requires, can be interpreted as a linguistic manifestation of a more general cognitive construal that is already present in children’s early psychological development.

2.2.2. The *directionality* of neutralisation

A second issue has to do with the *directionality* of the neutralisation relation. Other than just being “functionally” motivated by the paradigmatic structure of language (Coseriu 1992 [1988]: 214), I believe that other, non-linguistic facts should be taken into account as well. I hypothesise that the evaluation of one member of an opposition as a potentially neutral term is initially grounded in (speakers’ experience of) extralinguistic reality. The view that linguistic asymmetries should be derived from facts of extralinguistic reality has been one of the basic tenets within the “anti-markedness” literature. As discussed in § 2.1.1, Murphy (1994: 277-285, 2003: 184-188 and 2010: 236-237) has argued that extralinguistic (viz. physical and cultural) knowledge and experiential factors should ultimately replace explanations in terms of markedness. Many other authors, notably within CL (Lakoff 1987, Janda 1996, Taylor 1999, Geeraerts 2010, Cruse 2011, among others) or naturalness theory (Van Langendonck 1984, Mayerthaler 1981, Dressler 1985 and 2006, among others), have expressed the similar view that the evaluation of one of the terms of a contrastive pair as a potentially neutral term directly relates to facts of extralinguistic reality and that the notion of markedness (or neutralisation, for that matter) should therefore be abandoned. However, contrary to these authors, I believe that this view does not invalidate the concept of markedness (or neutralisation) in linguistic inquiry, quite on the contrary. Whether a linguistic opposition is eventually construed as an inclusive one or not still remains a fact of language that is to be differentiated from the non-linguistic, conceptual evaluation of this opposition outside of language (e.g. from the point of view of culture, biology etc.). In other words, linguistic and non-linguistic markedness are ultimately complementary concepts which are both useful to understand and analyse the structure of different semiotic systems.

Establishing a theory in which both concepts can be accommodated does not entail that the distinction is altogether superfluous. In the pair *day/night*, for example, the conceptual evaluation of *day* as “the period of time when people are usually awake and active” or “the period of time when the desired sunlight is present” undoubtedly plays an important role (both diachronically and synchronically) in the linguistic evaluation of the word *day* as the potentially neutral term in relation to its linguistic counterpart *night*.¹¹ However, this kind of non-linguistic, conceptual “(un)markedness” does not necessarily imply linguistic “(un)markedness”. This is apparent if we take into account differences between various languages. Consider the following example:

(5) ‘*brother/sister*’ (based on Coseriu (1992 [1988]: 225):

- (a) Spanish: mis hermanos (hermano/hermana)
Italian: i miei fratelli (fratello/sorella)
- (b) English: my brothers and sisters (brother/sister)
French: mes frères et mes soeurs (frère/soeur)
German: meine Brüder und Schwestern (Bruder/Schwester)
Dutch: mijn broers en zusters (broer/zuster)

As is well-known, in all of these languages the masculine form is unmarked as it can stand for the category of gender as a whole. Moreover, the construal of masculine as the unmarked word can probably be traced back to the male-dominated structuring of earlier societies. However, whether a masculine noun is encoded as being unmarked in contrast to its feminine counterpart is still a language-specific matter. From (5) it is evident that cultural markedness does not necessarily entail linguistic markedness: whereas in Spanish and Italian the masculine word for *brother* may be extended to cover both brothers and sisters, this type of neutralisation is not possible in English, French, German or Dutch. Thus, although the relevant oppositions are similar in terms of cultural markedness, they are not identical in terms of their linguistic markedness values.

Furthermore, linguistic (and non-linguistic) markedness values may be identical across various languages, but there may still be some important idiomatic differences across different languages, in particular regarding the (number of) contexts in which a neutral, generic term occurs. Consider the following examples cited by Cruse (1992: 293), which indicate what adjectives can occur in a neutral sense in specific expressions in English, French, Turkish and Arabic:

¹¹ For a discussion of the relation between the conceptual and linguistic evaluation of the word *day* (in German), see Willems (2005).

Table 1: Potential neutralisation contexts of the oppositions *long/short*, *good/bad* and *hot/cold* in English, French, Turkish and Arabic

	English	French	Turkish	Arabic
<i>as X as</i>	long, good	long, good	long, short, good, hot	(none)
<i>not as X as</i>	long, good	long, good	long, good, hot	(none)
<i>less X than</i>	good	long, good	/	(none)

These findings show that, although the cultural or perceptual background of the oppositions *long/short*, *good/bad* and *hot/cold* is comparable across the four languages (e.g. the term that may be used in the various expressions denotes more of a quality or is evaluatively positive – see also Lehrer 1985: 146)¹², the oppositions are different in terms of the contexts in which the neutralisations occur. Apart from emphasising the importance of taking into account idiomatic differences when describing neutralisable relations across various languages, this finding underscores the relevance and importance of keeping linguistic markedness (or neutralisation) apart from non-linguistic markedness.¹³

2.2.3. The possibility of *bidirectional* neutralisation

A third issue concerns the property of ‘bidirectionality’, which seems to be typical of certain linguistic oppositions. This issue has been thoroughly discussed in chapter three in relation to the opposition between ‘day’ and ‘night’. In chapter three, I showed that Coseriu’s claim about the unidirectionality of neutralisable oppositions is consistent with data concerning *Tag* and *Nacht* in present-day German, but it is inconsistent with data from Old and Middle High German and Old Saxon as well as corresponding findings from Basketo (a non-European, Afro-Asiatic language spoken in Ethiopia). Both the diachronic and typological observations demonstrated that the opposition between ‘day’ and ‘night’ can be neutralised in two directions (i.e. either by the word for ‘day’ or the word for ‘night’).

Lexical bidirectionality can also be observed in present-day German with respect to the opposition between masculine and feminine gender, albeit on the basis of some stipulation. In a short column of 24 August 2013 that appeared in the *Oldenburgische Volkszeitung*, the linguist Wilfried Kürschner points out that, under the impulse of feminist linguistics, the universities of Leipzig and Potsdam have recently stipulated that

¹² There appears to be an exception in Turkish, where the adjective “short” apparently may be used in a neutral sense in the expression “as X as”.

¹³ Another example is the opposition *homme/femme* in French, which is neutralisable in numerous contexts, whereas the neutralisation of this opposition in German or Dutch is restricted to a specific type of context and is highly idiomatic (e.g. “Ich brauche **acht Mann** und einen ganzen Tag, um [“I need eight people and an entire day to (...)”] eine Platte nach oben zu transportieren” – cf. chapter four).

grammatically feminine nouns such as *Professorin* ‘(female) professor’, *Leserin* ‘(female) reader’, *Diebin* ‘(female) thief’, *Schülerin* ‘(female) student’ from now on also can be used to refer to both men and women (see also Bußmann & Hellinger 2003: 164-165). Kürschner quotes from the new charter of the University of Leipzig (“In dieser Ordnung gelten grammatisch feminine Personenbezeichnungen gleichermaßen für Personen männlichen und weiblichen Geschlechts”), but shows himself strongly opposed to this kind of language policy: “Während das generische Maskulinum seinen Platz in der gut 1200-jährigen Geschichte der deutschen Sprache hat, ist das generische Femininum eine von politischen Kräften gesetzte Neuerung, die im Widerspruch zum Sprachgefühl und Sprachgebrauch der übergroßen Mehrheit der Sprecher und Hörer, der Schreiber und Leser der deutschen Sprache steht”. Of course, it remains to be seen whether the “politically informed” language use proposed by the universities of Leipzig and Potsdam will eventually be accepted and adopted in the entire German linguistic community, but it does show that long-established neutral forms such as the generic masculine may over time come into competition with alternative forms, evidencing at least the historical possibility of bidirectional neutralisation.¹⁴

The important theoretical conclusion that can be drawn from the property of “bidirectionality” exemplified by ‘day’ and ‘night’ in Old and Middle High German/Old Saxon and in Basketo and the case of the “generic feminine” discussed by Kürschner, is that the potentially “archisememic” use is not always a privilege of one of the terms of a neutralisable opposition. As a consequence, the “potential for being used with a neutral meaning” does not always have to coincide with unmarked status. That is, in the case of bidirectional neutralisation, both terms have the potential for being used with a neutral meaning and, thus, are on a par as far as their semantic potential is concerned. Therefore, contra Coseriu (1992 [1988]: 214), I argue that the juxtaposition of a positive semantic feature vs. a negative semantic feature cannot for all cases explain which term can be used with a neutral meaning in particular contexts. Regarding oppositions that exhibit the property of bidirectional neutralisation, it is the specific *type of context*, not simply the “form” of the opposition itself, that requires the selection of either of both terms as the semantically neutral one, a selection that is moreover dependent on the norms and rules of a particular language. In other words, the neutralisability of a linguistic opposition is not always triggered by a specific (“lexicalised”) markedness relation pertaining to the level of the linguistic opposition itself.

¹⁴ The possibility of bidirectional neutralisation was, in fact, already hinted at by Trubetzkoy (1939: 69-74), viz. when he writes that both members of a neutralisable phonological opposition may represent the archiphoneme, one in one context type, the other in another context type (see also Silverman 2012: 46). In French, for example, the opposition between /e/ and /ɛ/ is functional in final open syllables (e.g. *lait* /le/ ‘milk’ and *les* /le/ ‘the’). However, in open syllables only /e/ occurs, while in closed syllables only /ɛ/ occurs.

In cases of bidirectional neutralisation, the direction of neutralisation is determined by the type of (linguistic) context. Though this was not investigated in detail, *naht* in Old High German appears to have been typically used as the neutral term in contexts of duration and temporal distance (which I suggest to call *durative* and *retro-/prospective* contexts). Conversely, *tag* appears to have been normally used as the neutral term in contexts where it refers to a day of the week or in contexts where reference is made to a special day of the month or the year, often in connection with a religious or sacred festival (which could be called *punctual* contexts). Similar conclusions can be drawn from in-depth analyses of the corresponding lexical items in Old Icelandic (*dagr* vs. *nátt*).¹⁵ The bidirectional neutralisation relation between *tag* and *naht* in Old High German could accordingly be schematised as follows:

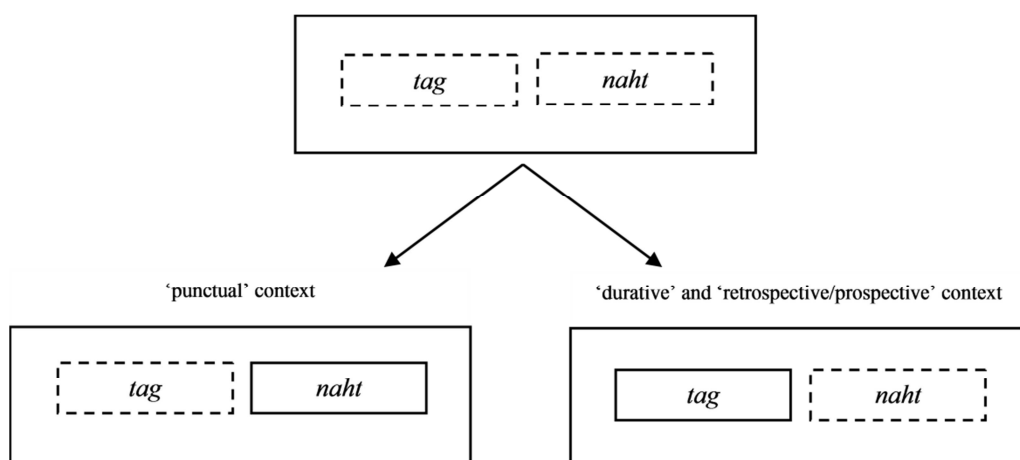


Figure 2: The bidirectional neutralisation relation between *tag* and *naht* in Old High German in relation to different types of context

Hence, two types of neutralisation should be distinguished: “unidirectional neutralisation” in which case the direction of the inclusive construal is determined on the systemic level of the lexical contrast, and “bidirectional neutralisation” in which case the direction of the inclusive construal is determined by the specific type of context. In the history of a language, bidirectional neutralisation may gradually develop into unidirectional neutralisation (as illustrated by the words for ‘day’ and ‘night’ in the Germanic languages) or vice versa (the “generic feminine” in present-day German may serve as an illustration).

The observation that in the case of bidirectional neutralisation both terms have the potential for being used with a neutral meaning, raises questions, here again, on the usefulness of the concept of markedness. However, in spite of the fact that both terms of these oppositions have a double semantic functionality, I argue that one of the terms may

¹⁵ The results of these analyses are summarised in a forthcoming article entitled: M. De Backer & L. De Cuypere: “Lexical neutralisation: An empirical investigation into the Old Icelandic lexical pairs *dagr/nátt* and *vetr/sumar*”.

nevertheless be perceived or (a term that I have often made use of in this dissertation) “construed” as being the unmarked term. That is to say, for oppositions that exhibit the property of bidirectional neutralisation additional criteria play a role in determining which of the members is marked and which is unmarked. For the sake of argument, I adduce some examples from the corpus findings of the Old Icelandic pair *dagr* and *nátt*. Several observations indicate that the two terms were not on a par, despite the fact that both terms could be used with the neutral meaning “24 hour period”:

- in the entire corpus, *dagr* is about 1.5 times as frequent as *nátt*;
- in the sample that was investigated, *dagr* is used more frequently as a neutral term than *nátt*;
- neutral *dagr* occurs both in the singular and in the plural, whereas neutral *nátt* only occurs in the plural;
- in analogous constructions, *dagr* is often neutral, whereas *nátt* is oppositional (e.g. *Þetta var eina nátt* ‘it was/happened one night’/*Það var einn dag* ‘it was/happened one day’);
- *dagr* is sometimes used as a neutral term in contexts in which *nátt* is usually used as a neutral term (i.e. duration and temporal distance). The reverse does not occur.

The point that I would like to emphasise, following the line of reasoning adopted by Hjelmslev (1935: 102, 1971 [1939]: 95-96) and Andersen (2001: 25, 2008: 103-105; 116) who both pointed to the cognitive primacy of inclusion, is that the inclusive, asymmetrical construal of seemingly symmetrical oppositions is a pervasive trait not only of natural language, at different levels, but also of human thinking in general (cf. above § 2.2.1).

2.2.4. Different types of semantic markedness opposition

A fourth issue is related to the internal structure of markedness relations, an issue that was already raised in chapter two. In this chapter, I argued that, from a logico-semantic perspective, markedness relations fall under the logically exclusive and linguistically inclusive mode of opposition, setting them apart from the logically and linguistically exclusive mode of opposition (e.g. *king/queen*) and the logically and linguistically inclusive mode of opposition (e.g. *flower/rose*). I hypothesised that both Coseriu’s neutralisation theory and Jakobson’s markedness theory fail to acknowledge that semantic oppositions, belonging to the logically exclusive and linguistically inclusive mode of opposition, may differ with respect to how both members are opposed to each other, viz. either as the contrast between a positive and a negative term or as the contrast between a positive and a neutral term. Recall that Jakobson describes the relation between marked and unmarked as the contrast between the plus-value of a feature (“positive”) and a corresponding zero-value (“neutral”), whereas Coseriu understands this relation as the contrast between the plus-value of a feature (“positive”) and the minus-value of that feature (“negative”). Investigating data from present-day German on the basis of three

different methods (a corpus analysis, a sentence processing task, and an acceptability judgment task), I demonstrated that in some oppositions it is the specific, oppositional meaning that has functional priority over the neutral, generic one (e.g. *Tag/Nacht*, *Mann/Frau*), whereas in other oppositions it is the other way round (e.g. *Student/Studentin*, *Artz/Ärztin*, *Löwe/Löwin*, and *Katze/Kater*). These findings indicate that a rigid application of either Jakobson's or Coseriu's theory to all lexical and grammatical relations is problematic. Therefore, a revised markedness model was outlined that takes the observed variability into account. In this model the logically exclusive and linguistically inclusive mode of opposition are placed on a continuum alongside the logically and linguistically exclusive mode of opposition, on the one hand, and the logically and linguistically inclusive mode of opposition, on the other.

2.3. A revised account of neutralisation/markedness

Against the backdrop of the critical review of Coseriu's neutralisation theory provided above, I will briefly outline, by way of summary, a revised account of neutralisation, which presents an attempt to overcome the flaws identified in Coseriu's theory of neutralisation (and, in extension, Jakobson's theory of markedness).

To this end, the schematic overview presented in chapter two, is adopted and further elaborated, as shown in figure 3:

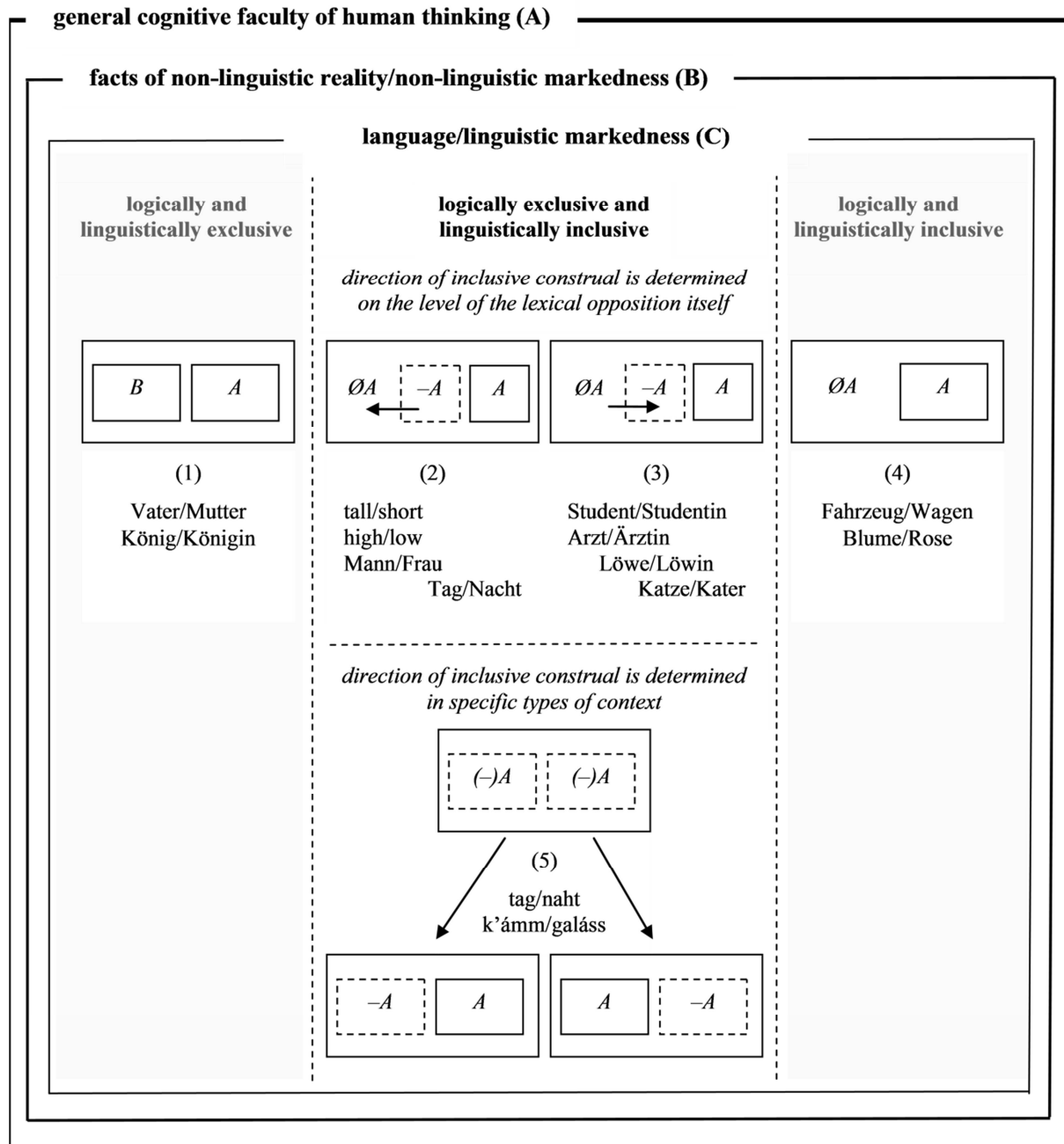


Figure 3: A revised account of semantic neutralisation/markedness in the lexicon

On the left-hand and right-hand side of the scale are oppositions that, *stricto sensu*, fall outside of the scope of linguistic markedness, as they are either non-neutralisable (1) (e.g. *Vater/Mutter*)¹⁶ or inherently asymmetrical and inclusive (4) (e.g. *Blume/Rose*). Linguistic markedness pertains to linguistic oppositions of group (2) (e.g. *tall/short*) and (3) (e.g.

¹⁶ Recall that, as Andersen (2001: 44-45) has pointed out, in some cases one of the terms of an inherently exclusive opposition may nevertheless be “cognised” as an inclusive term (particularly by analogy with similar types of opposition in the language system). In chapter four, the English word *father* was cited as an example.

Löwe/Löwin). These are contrasts that are characterised by an inclusive construal such that one of the terms of the opposition has two functions.

Recall that in some instances of this kind of contrast, the specific, oppositional meaning has functional priority over the neutral, generic meaning (2), whereas the reverse is true in other instances (3). Importantly, the direction of the inclusive construal with respect to oppositions of group (2) and (3) is determined on the systemic level of the lexical contrast. Thus, we can say that, for oppositions of this kind, the inclusive asymmetrical relation is *lexicalised* in the sense that, synchronically, it is part of the semantic structure of the lexical opposition itself.¹⁷ As a result, in any context where the semantic difference between both terms of the opposition is cancelled, it is always the same term (viz. unmarked one) that is used to express the neutral value (“unidirectionality”).

In contrast, for oppositions belonging to group (5), the inclusive construal is not defined on the systemic level of the lexical contrast. Rather, the asymmetry is tied to specific types of context: depending on the context, one or the other term may function as the neutral one (“bidirectionality”). One can argue, then, that from the point of view of the opposition itself, neither term is semantically marked or unmarked with respect to its opposite, as both terms may function as neutral terms in specific contexts. However, as we also argued above (§ 2.2.3), on the basis of factors such as the frequency with which the terms may be used as neutral terms or the number of contexts in which they occur as neutral terms, one of the terms may nevertheless appear to be “unmarked” with respect to its counterpart.

3. Concluding remarks

The revised markedness model presented here suggests that the concept of “unmarked” in semantics (in relation to the concept of “marked”) should not be described as a static concept (as in the theories of Jakobson and Coseriu), but as a dynamic one, given that its precise definition turns out to vary from one lexical opposition to another (cf. (2) and (3)).

To round off my discussion of neutralisation and markedness, I briefly evaluate the theoretical value of the proposed model with the examination of an often-mentioned example, viz. the opposition between antonymous adjectives such as *tall/short*. It may have become clear that the view I have been advocating throughout this dissertation is consistent with the approach adopted in “classical” neutralisation/markedness theory.

¹⁷ It is particularly from this perspective that one may appreciate Coseriu’s (1992 [1988]: 214) claim that it is the opposition itself that generates the neutralisability.

According to this approach, the question of the inclusive semantic potential of words such as *tall* can only be properly addressed if one considers *tall* to be systemically the unmarked member of a paradigmatic opposition in which *short* is the marked member. I have argued that it is not possible to reduce this question to an issue of distributional analysis (Murphy), a question of prototypicality (Lakoff) or a matter of polysemy (Taylor). The inclusive use of *tall* does not directly follow from non-linguistic, experiential facts, but rather reflects a markedness structure on the level of the language system, i.e. systemic asymmetry. As I already argued in § 2.2.1, I take this hierarchical structuring of semantically – i.e. paradigmatically – related words, which is aptly called linguistic markedness, to be a reflection or an instantiation of a more general cognitive capacity of human thinking. This capacity consists of the ability to structure experience into hierarchically organised contrasts in which one element is construed as the (potentially) generic element, covering the entire range of the contrast ((A) in figure 3 above) (cf. also Andersen 2001: 44, Greenberg 2005 [1966]: 25).

While the more general cognitive perspective I have been expounding may be useful in clarifying the “source” of the asymmetry that can be observed in numerous linguistic oppositions, it does not yet explain the “direction” in which an opposition may be cancelled, i.e. the issue which element of the opposition can be used as the generic term. As discussed in § 2.2.2, unlike many markedness/neutralisation theoreticians, I do not want to exclude non-linguistic facts altogether from the discussion of the assignment of markedness values ((B) in figure 3). Unlike Coseriu (1992 [1988]: 214), who argues that it is only the “form of the opposition” that explains which of the terms of an opposition is the unmarked term and which one the marked term, I take the view that the assignment of linguistic markedness values may very well be related to extralinguistic facts (cf. Andersen 2008: 105, who describes extralinguistic reality as the physical or cognitive “substratum” of language). At the same time, however, taking into account non-linguistic, experiential facts does not imply, as shown in § 2.2.2, that markedness values are identical across languages: despite cognitive or cultural similarities, it remains a property of each language system whether a markedness relationship assigned to elements of non-linguistic systems is adopted or “lexicalised”.

In other words, although the extralinguistic “setting” of different language communities may be similar, the assignment of linguistic markedness values remains, though comparable across many languages, a language-specific matter. Hence, the potential inclusive use of an adjective such as *tall* is not directly motivated by non-linguistic factors, but rather the result of a linguistic operation on the part of the speakers of a language, an operation which is, to be sure and as argued above, part of a more general cognitive human competence: *tall* is construed as the potentially neutral term, which accounts for the fact that it can be used in contexts where the semantic contrast between *tall* and *short* is cancelled out ((C) in figure 3). In this sense, I concur with Coseriu that linguistic markedness belongs, to use a felicitous terminological distinction introduced by

Coseriu, to a speaker's "idiomatic knowledge" of a language (system) (cf. Coseriu 2007 [1988]: Sprachkompetenz 69-75).

Summary in Dutch

Lexicale neutralisatie: Theoretische en empirische perspectieven

Inleiding

Dit proefschrift handelt over het fenomeen *lexicale neutralisatie* zoals gedefinieerd door Eugenio Coseriu (1976, 1987, 1992 [1988], e.a.). Voor Coseriu houdt neutralisatie de opheffing in van een functionele oppositie tussen twee taaleenheden (“termen”) in bepaalde contexten, waarbij in de neutralisatiecontext de ene term de andere includeert. De term “neutralisatie” werd oorspronkelijk geïntroduceerd in de structuralistische fonologie (Trubetzkoy 1939), waar het o.m. gebruikt wordt om naar een fenomeen als de verscherping van stemhebbende medeklinkers te verwijzen. In het Nederlands treedt er bijvoorbeeld neutralisatie op van de oppositie tussen /t/ en /d/ op het einde van een woord als *bond* [bont]. Aangezien in woordfinale positie steeds de stemloze /t/ gerealiseerd wordt en de oppositie tussen /t/ en /d/ in die context niet langer functioneel (i.e. distinctief of betekenisonderscheidend) is, stellen aanhangers van het neutralisatieprincipe dat de eenheid die gebruikt wordt in de neutralisatiecontext een “archifonemische” waarde heeft, wat betekent dat die eenheid enkel de kenmerken realiseert die de leden van de oppositie gemeenschappelijk hebben. De hypothese van auteurs als Coseriu (1992 [1988]) (vgl. ook Martinet 1968) is evenwel dat hetzelfde mechanisme ook op andere taalniveaus (m.n. het lexicon en de grammatica) van toepassing is. Zo stelt Coseriu (1992 [1988]: 215-219) bijvoorbeeld dat het Duitse woord *Tag* ‘dag’ het woord *Nacht* ‘nacht’ kan includeren (denk bv. aan een context als *sich vier Tage in Paris aufhalten* ‘vier dagen in Parijs verblijven’).

Het concept *lexicale neutralisatie* wordt binnen verschillende theoretische kaders op uiteenlopende manieren beschreven. De vraag naar de precieze interpretatie van het concept door taalkundigen van verschillende stromingen werd echter nog niet eerder gesteld, en ook de vraag naar de waarde van Coseriu’s lexicale neutralisatietheorie werd

nog niet eerder uitvoerig onderzocht, noch theoretisch, noch empirisch. Dit proefschrift beoogt deze lacune te vullen.

We beperken ons onderzoeksobject tot het domein van het *lexicon*, en wel om twee redenen. Ten eerste is neutralisatie in de fonologie reeds intensief bestudeerd in de literatuur (vgl. recent nog het boek van Silverman 2012 waarin vrijwel alle fonologische neutralisatietheorieën sedert Trubetzkoy aan bod komen). Ten tweede valt een uitgebreide analyse van neutralisatie in de grammatica buiten het bestek van dit onderzoek: grammaticale neutralisatie (bv. het ‘historisch praesens’ in *Caesar steekt de Rubicon over*) verschilt duidelijk van lexicale neutralisatie (bv. het gebruik van *dag* met de betekenis ‘24 uur’ in *vier dagen in Parijs verblijven*) en vereist daarom een eigen analytische benadering (vgl. ook Coseriu 1985: xxxv over neutralisatie op het niveau van het discours). De algemene doelstellingen van dit proefschrift kunnen als volgt samengevat worden:

- inzicht verwerven in de manier waarop verschillende taalkundigen het neutralisatiebegrip hebben aangewend in de lexicale semantiek en tot een coherente invulling van het begrip komen;
- verschillende voorbeelden van lexicale neutralisatie volgens het model van Coseriu onderzoeken om de theoretische en empirische waarde van Coseriu’s neutralisatietheorie te kunnen evalueren.

Het onderzoek werd uitgevoerd in de vorm van verschillende case studies die elk een specifiek onderwerp aansnijden. De resultaten van iedere case study werden telkens in een artikel samengevat, zodat elk hoofdstuk van het proefschrift opgevat kan worden als een op zichzelf staand artikel. Hieronder geef ik een kort overzicht van de onderzoeksvragen die in elk van de artikels behandeld worden.

Hoofdstuk 1: The concept of neutralisation outside the field of phonology

Na de introductie van de term “neutralisatie” in de fonologie hebben verschillende taalkundigen de term naar andere domeinen van de taal geëxtrapoleerd. Sindsdien werden echter uiteenlopende fenomenen met neutralisatie in verband gebracht. Een eerste onderzoeksvraag die zich opdringt, is of alle voorbeelden uit de literatuur wel degelijk onder de noemer *neutralisatie* vallen of eerder aan andere, met neutralisatie verwante fenomenen beantwoorden en dus beter ook terminologisch van neutralisatie zouden onderscheiden worden. Daartoe worden verschillende teksten uit de moderne taalkunde geanalyseerd waarin er sprake is van neutralisatie buiten de fonologie.

Het feit dat het begrip neutralisatie in de moderne taalkunde sinds het structuralisme in verschillende paradigma’s en bij verschillende auteurs een andere invulling heeft gekend, heeft ervoor gezorgd dat er in het huidige taalwetenschappelijke discours geen coherente theorie bestaat die neutralisatie op betekenisniveau van andere verwante taalfenomenen (met name syncretisme, metonymie, enz.) duidelijk afbakent. De conclusie van deze

metatheoretische analyse is dat het gebruik van de term “neutralisatie” in de semantiek beperkt moet worden tot een specifiek talig fenomeen, nl. de opheffing van een semantische oppositie tussen twee (of meer) lexicale (of grammaticale) eenheden in bepaalde syntagmatische contexten, waarbij in de neutralisatiepositie één van de eenheden de andere eenheid van de oppositie semantisch includeert. Uit de metatheoretische analyse van het neutralisatiebegrip blijkt dat voor vele auteurs, zo ook voor Coseriu, neutralisatie nauw samenhangt met *gemarkeerdheid*: het is namelijk de ongemarkeerde term van een oppositie (bv. Nederlands *dag*) die met een neutrale betekenis gebruikt kan worden, dit in tegenstelling tot de gemarkeerde term (*nacht*). Sommige taalkundigen, zoals bijvoorbeeld Roman Jakobson, beschrijven de semantische inclusierelatie die kan bestaan tussen de twee leden van een oppositie echter enkel in termen van gemarkeerdheid, zonder daarbij over neutralisatie te spreken. In het tweede hoofdstuk gaan we daarom dieper in op Jakobson’s gemarkeerdheidsbegrip en plaatsen we deze tegenover Coseriu’s gemarkeerdheidsbegrip in het kader van diens neutralisatietheorie. In dit proefschrift beogen we evenwel niet om een uitvoerig overzicht te geven van het begrip gemarkeerdheid. Hiervoor verwijzen we naar de relevante literatuur, meer bepaald Greenberg 2005 [1966], Eckman, Moravcsik and Wirth (1986), Tomić (1989), Andrews 1990, Battistella (1990, 1996), Andersen (2001, 2008), Haspelmath (2006), e.a..

Hoofdstuk 2: Neutralisation and semantic markedness: An inquiry into types of lexical opposition in German

Een interessante vaststelling is dat Jakobson’s gemarkeerdheidsbegrip in het domein van de semantiek fundamenteel verschilt van Coseriu’s gemarkeerdheidsbegrip: terwijl Jakobson de oppositie tussen gemarkeerd en ongemarkeerd op betekenisniveau definieert als de oppositie tussen de plus-waarde van een kenmerk en de nul-waarde van dat kenmerk (A vs. ØA), beschrijft Coseriu deze oppositie als de tegenoverstelling van de plus-waarde van een kenmerk en de min-waarde van dat zelfde kenmerk (A vs. niet-A). In dit hoofdstuk nemen we het standpunt in dat een rigide toepassing van één van beide beschrijvingswijzen op alle lexicale (en grammaticale) opposities geen rekening houdt met het feit dat bij verschillende semantische opposities de relatie tussen gemarkeerd en ongemarkeerd ook verschillend gedefinieerd dient te worden. Om deze hypothese te staven worden tien lexicale oppositieparen in het Duits onderzocht aan de hand van een corpusanalyse en twee offline-experimenten, nl. een zinsproductietaak en een zinsinterpretatietask. Op basis van de analyses wordt een alternatief gemarkeerdheidsmodel voorgesteld dat beter beantwoordt aan de verschillende types lexicale oppositie.

Hoofdstuk 3: Lexical neutralisation: a case study of the lexical opposition ‘day’/‘night’

In het derde hoofdstuk wordt nagegaan of neutralisatie in de semantiek altijd in één richting verloopt, zoals Coseriu (1992 [1988]: 218) beweert. Of zijn er gevallen mogelijk waarbij een betekenisoppositie door beide termen van de oppositie geneutraliseerd kan worden? Deze vraag wordt onderzocht aan de hand van de lexicale oppositie *Tag/Nacht* in het Duits, één van de typevoorbeelden van neutralisatie volgens Coseriu, op basis van zowel synchrone als diachrone corpusdata.

De analyse in dit hoofdstuk toont aan dat het unidirectionaliteitsprincipe opgaat voor het huidige Duits, maar niet voor eerdere fasen van het Duits of andere Germaanse talen. Daarnaast tonen ook voorbeelden van het Basketo (een Omotische taal van Ethiopië) aan dat de oppositie tussen de lexicale eenheden voor ‘dag’ en ‘nacht’ in deze taal in beide richtingen neutraliseerbaar is en dat unidirectionaliteit dus ook vanuit synchroon standpunt geen universeel principe is.

Een bijkomende onderzoeksvraag is of de zogenaamde “bifunctionaliteit” van ongemarkeerde termen (dit is het feit dat deze termen zowel een oppositionele als neutrale betekenis kunnen hebben) verenigbaar is met de structuralistische monosemiehypothese. Daartoe worden verschillende semantische analyses (polysemie, monosemie, homonymie en neutralisatie of “duosemie”, cf. Van Der Gucht 2005: 166-167) met elkaar vergeleken en wordt nagegaan of de semantische variatie van de ongemarkeerde term niet beter beschreven kan worden aan de hand van een alternatieve analyse die empirisch coherenter is en tegelijk trouw blijft aan de principes van een structureel-functionele taaltheorie.

Hoofdstuk 4: The interpretation of masculine personal nouns in German and Dutch: A comparative experimental study

Het vierde hoofdstuk handelt over de interpretatie van grammaticaal mannelijke functiebenamingen. Zoals beschreven vanuit de neutralisatietheorie (Coseriu 1975 [1957], 1992 [1988]) en de gemarkeerdheidstheorie (Jakobson 1971 [1932], 1971 [1936]; Greenberg 2005 [1966]; Waugh 1982; Andersen 2001, 2008) kunnen in vele talen mannelijke functiebenamingen zowel genderneutraal als genderspecifiek gebruikt worden. Dit hoofdstuk neemt een contrastief perspectief in en onderzoekt de verschillen in interpretatie van mannelijke functiebenamingen in het Nederlands en het Duits.

Met betrekking tot het Duits tonen verscheidene studies aan dat genderneutraal gebruikte mannelijke functiebenamingen (bv. *Jeder Raucher weiß, dass seine Gewohnheit schädlich ist* ‘Elke roker weet dat zijn gewoonte schadelijk is’) toch een sterke mannelijke connotatie hebben in vergelijking met alternatieve genderneutrale vormen (bv. *Jeder Raucher und jede Raucherin weiß, dass seine/ihre Gewohnheit schädlich ist* ‘Elke roker/rookster weet dat zijn/haar gewoonte schadelijk is’ (Klein 1988, Scheele & Gauler 1993,

Irmen & Köhncke 1996, Braun et al. 1998, Stahlberg et al. 2001, Stahlberg & Sczesny 2001). In het Nederlands worden mannelijke vormen daarentegen steeds meer gebruikt om zowel naar mannen als vrouwen te verwijzen (Gerritsen 2002).

In dit hoofdstuk wordt onderzocht (i) op welke manier moedertaalsprekers van het Duits en het Nederlands mannelijke functiebenamingen in referentiële contexten interpreteren, (ii) welke variabelen bij de interpretatie een rol spelen (o.a. geslacht van de respondent, getal, definitie, type lexicale eenheid en relatieve frequentie van de functiebenaming) en (iii) hoe de respondenten het referentieel potentieel van de onderzochte lexicale eenheden inschatten. Met “referentieel potentieel” bedoelen we de types referenten (mannelijk, vrouwelijk of beide) waarnaar de onderzochte lexicale eenheden kunnen verwijzen. Het referentieel potentieel van een woord als *student* is bv. uitgebreider dan dat van *dag*. Met het woord *dag* kan men verwijzen naar het lichte deel van een etmaal en naar de hele periode van 24, maar met het woord *student* kan men niet alleen verwijzen naar een mannelijke student en een student ongeacht het geslacht maar ook naar een vrouwelijke student. Verschillende lexicale eenheden, die traditioneel in termen van gemarkeerdheid beschreven worden (ze zijn de “ongemarkeerde” term van een oppositie), kunnen dus ook verschillen in hun referentieel potentieel. De resultaten tonen ten eerste aan dat mannelijke functiebenamingen in het Duits vaker als genderspecifiek geïnterpreteerd worden dan in het Nederlands. Ten tweede blijkt de interpretatie van de onderzochte lexicale eenheden significant geassocieerd te zijn met de variabelen getal, type lexicale eenheid en relatieve frequentie. En ten derde wijzen de data uit dat de Duitse mannelijke vormen een restrictiever referentieel potentieel hebben dan hun Nederlandse equivalenten. De data tonen in het algemeen dat er een duidelijk verschil tussen het Duits en het Nederlands is, maar dit verschil is meer uitgesproken in het enkelvoud dan in het meervoud.

Conclusies

In het afsluitende hoofdstuk worden de verschillende inzichten van de afzonderlijke case studies samengevat. Daarnaast gaan we in dit laatste hoofdstuk dieper in op een aantal belangrijke alternatieve analyses die voorgesteld werden in de “anti-gemarkeerdheids-literatuur”, aangezien dit niet aan bod komt in de case studies zelf (zoals duidelijk wordt uit de verschillende case studies, zijn de argumenten tegen de gemarkeerdheidstheorie ook van toepassing op Coseriu’s neutralisatietheorie). Op basis van het overzicht van de alternatieve analyses en de resultaten van de verschillende case studies gaan we over tot een laatste kritische bespreking van Coseriu’s neutralisatietheorie. Bij wijze van afronding wordt ten slotte een gerevisieerd neutralisatie-/gemarkeerdheidsmodel voor het domein van de semantiek geschetst, dat enerzijds de waarde van Coseriu’s neutralisatietheorie erkent, maar anderzijds ook een aantal lacunes probeert aan te vullen.

Bibliography

- Akamatsu, Tsutomu. 1976. De la notion de 'représentant de l'archiphonème'. In Luc Bouquiaux, ed. *Actes du deuxième colloque de linguistique fonctionnelle*. Clermont-Ferrand: Centre régional et de documentation pédagogique, 93-101.
- Akamatsu, Tsutomu. 1988. *The Theory of Neutralization and the Archiphoneme in Functional Phonology*. Amsterdam/Philadelphia: John Benjamins.
- Andersen, Henning. 1972. Diphthongization. *Language* 48 (1), 11-50.
- Andersen, Henning. 1989. Markedness in Synchrony and Diachrony. In Olga Mišeska Tomić, ed. *Markedness theory – the first 150 years*. Berlin/ New York: Mouton de Gruyter, 11-46.
- Andersen, Henning. 2001. Markedness and the theory of linguistic change. In Henning Andersen, ed. *Actualization. Linguistic Change in Progress*. Amsterdam/Philadelphia: John Benjamins, 21-57.
- Andersen, Henning. 2008. Naturalness and markedness. In Klaas Willems and Ludovic De Cuypere, eds. *Naturalness and Iconicity in Language*. Amsterdam/Philadelphia: John Benjamins, 101-119.
- Andrews, Edna. 1990. *Markedness Theory. The Union of Asymmetry and Semiosis in Language*. Durham/London: Duke University Press.
- Baerman, Matthew, Dunstan Brown and Greville Corbett. 2005. *The Syntax-Morphology Interface. A Study of Syncretism*. Cambridge: Cambridge University Press.
- Battistella, Edwin. 1990. *Markedness: The Evaluative Superstructure of Language*. Albany: State University of New York Press.
- Battistella, Edwin. 1996. *The logic of markedness*. New York/Oxford: Oxford University Press.
- Bayer, Samuel and Mark Johnson. 1995. Features and agreement. *Proceedings of the Thirty-Third Annual Meeting of the Association for Computational Linguistics*, 70-76.
- Bayer, Samuel. 1996. The coordination of unlike categories. *Language* 72 (3), 579-616.
- Bazell, Charles. 1956. Three Conceptions of Phonological Neutralisation. In Morris Halle, ed. *For Roman Jakobson, essays on the occasion of his sixtieth birthday*. The Hague: Mouton, 25-30.
- Becker, Thomas. 2008. Zum generischen Maskulinum: Bedeutung und Gebrauch der nicht-movierten Personenbezeichnungen im Deutschen. *Linguistische Berichte* 213, 65-75.
- Blank, Andreas. 2001. *Einführung in die lexikalische Semantik für Romanisten*. Tübingen: Niemeyer.

- Brasington, Ron. 1994. Neutralization. In R.E. Asher, J.M.Y. Simpson, eds. *The Encyclopedia of Language and Linguistics*, Vol. 5. Oxford/New York/Seoul/Tokyo: Pergamon Press, 2784-2786.
- Braun, Friederike. 1991. Mehr Frauen in die Sprache. Leitfaden zur geschlechtergerechten Formulierung. Die Frauenministerin des Landes Schleswig-Holstein, Kiel.
- Braun, Friederike, Anja Gottburgsen, Sabine Sczesny and Dagmar Stahlberg. 1998. Können Geophysiker Frauen sein? Generische Personenbezeichnungen im Deutschen. *Zeitschrift für Germanistische Linguistik* 26, 265-283.
- Braune, Friederike, Sabine Sczesny and Dagmar Stahlberg. 2005. Cognitive effects of masculine generics in German: An overview of empirical findings. *Communications* 30, 1-21.
- Brugman, Claudia. 1997. Polysemy. In Jef Verschueren, Jan-Ola Östman, Jan Blommaert and Chris Bulcaen, eds. *Handbook of Pragmatics*. Amsterdam/Philadelphia: John Benjamins, 1-26.
- Brugman, Claudia. 1981[1988]. The story of over. M.A. thesis. Linguistics Dept, University of California, Berkeley (Published [1988] as *The Story of Over: Polysemy, Semantics and the Structure of the Lexicon*. New York: Garland Press).
- Bußmann, Hadumond and Marlis Hellinger. 2003. Engendering female visibility in German. In Hadumond Bußmann and Marlis Hellinger, eds. *Gender across languages*, vol. 3. Amsterdam/Philadelphia: John Benjamins, 141-174.
- Bybee, Joan. 2010. Markedness: Iconicity, Economy, and Frequency. In Jae Jung Song, ed. *The Oxford handbook of language typology*. Oxford: Oxford University Press, 131-147.
- Cantineau, Jean. 1952. Les oppositions significatives. *Cahiers Ferdinand de Saussure* 10, 11-40.
- Cantineau, Jean. 1955. Le classement logique des oppositions. *Word* 11, 1-9.
- Chvany, Catherine. 1992. Multi-level markedness in Russian, English and Bulgarian. In Andrew Mackie, Tatyana McAuley and Cynthia Simmons, eds. *For Henry Kučera. Studies in Slavic philology and computational linguistics*. Ann Arbor: Michigan Slavic Publications, 49-72.
- Clark, Eve Vivienne. 2005. Meaning: Development. In Keith Brown ed., *Encyclopedia of Language and Linguistics* (2nd ed.). London: Elsevier, 577-584.
- Coene, Ann. 2006. Lexikalische Bedeutung, Valenz und Koerzion. Hildesheim: Olms.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Corbett, Greville. 1991. *Gender*. Cambridge: Cambridge University Press.
- Corréard, Geneviève. 1957. La notion de neutralisation dans la morphologie et le lexique. Rapport sur les réponses au questionnaire. In André Martinet, ed. *Travaux de l'Institut de Linguistique* 2. Paris: Librairie C. Klincksieck, 162-182.
- Coseriu, Eugenio. 1974 [1958]. *Synchronie, Diachronie und Geschichte. Das Problem des Sprachwandels* (Spanish original 1958). Translated by Helga Sohre, München: Wilhelm Fink (21984).
- Coseriu, Eugenio and Horst Geckeler. 1974. Linguistics and Semantics. In Thomas Sebeok, ed. *Current Trends in Linguistics, XII, Linguistics and Adjacent Arts and Sciences*. The Hague/Paris: Mouton, 103-171.
- Coseriu, Eugenio. 1975 [1952]. System, Norm und Rede. In Uwe Petersen, ed. *Sprachtheorie und Allgemeine Sprachwissenschaft*. München: Fink Verlag, 11-101.

- Coseriu, Eugenio. 1975 [1957]. Logizismus und Antilogizismus in der Grammatik (Spanish original Montevideo, 1957). In Uwe Petersen, ed. *Sprachtheorie und Allgemeine Sprachwissenschaft*. München: Fink Verlag, 210-233.
- Coseriu, Eugenio. 1976(d). *Das Romanische Verbalsystem*. Tübingen: Narr.
- Coseriu, Eugenio. 1978 [1964]. Für eine strukturelle Semantik. In Horst Geckeler, ed. *Strukturelle Bedeutungslehre*. Darmstadt: Wissenschaftliche Buchgesellschaft, 90-163.
- Coseriu, Eugenio. 1978 [1966]. Einführung in die strukturelle Betrachtung des Wortschatzes. In Horst Geckeler, ed. *Strukturelle Bedeutungslehre*. Darmstadt: Wissenschaftliche Buchgesellschaft, 193-238.
- Coseriu, Eugenio. 1978 [1968]. Die lexematischen Strukturen. In Horst Geckeler, ed. *Strukturelle Bedeutungslehre*. Darmstadt: Wissenschaftliche Buchgesellschaft, 254-273.
- Coseriu, Eugenio. 1978 [1973]. *Probleme der strukturellen Semantik*. Tübingen: Narr.
- Coseriu, Eugenio. 1985. Linguistic Competence: What Is It Really? *The Modern Language Review* 80 (4), xxv-xxxv.
- Coseriu, Eugenio. 1987 [1971]. Semantik und Grammatik. In Uwe Petersen, ed. *Formen und Funktionen. Studien zur Grammatik*. Tübingen: Max Niemeyer, 85-95.
- Coseriu, Eugenio. 1987. Grundzüge der funktionellen Syntax. In Uwe Petersen, ed. *Formen und Funktionen. Studien zur Grammatik*. Tübingen: Max Niemeyer, 133-176.
- Coseriu, Eugenio. 1992 [1988]. *Einführung in die Allgemeine Sprachwissenschaft*. Tübingen: Francke.
- Coseriu, Eugenio. 1995. Defensa de la Lexemática. Lo acertado y lo erróneo en las discusiones acerca de la semántica estructural en España. In Ulrich Hoinkes, ed. *Panorama der Lexikalischen Semantik. Thematische Festschrift aus Anlaß des 60. Geburtstags von Horst Geckeler*. Tübingen: Narr, 113-124.
- Coseriu, Eugenio. 2000 [1990]. Structural semantics and 'cognitive' semantics. *Logos and Language. Journal of General Linguistics and Language Theory* I (1), 19-43. (Translated from the Spanish original by Klaas Willems and Torsten Leuschner: Coseriu, Eugenio. 1990. *Semántica estructural y semántica 'cognitiva'*. *Jornadas de filología. Col·lecció homenatge al Professor Francisco Marsá*. Universidad de Barcelona, 232-289.)
- Coseriu, Eugenio. 2001 [1976a]. Logique du langage et logique de la grammaire. In Hiltraud Dupuy-Engelhardt, Jean-Pierre Durafour and François Rastier, eds. *L'homme et son langage*. Louvain: Editions Peeters, 141-164.
- Coseriu, Eugenio. 2001 [1976b]. L'étude fonctionnelle du vocabulaire. In Hiltraud Dupuy-Engelhardt, Jean-Pierre Durafour and François Rastier, eds. *L'homme et son langage*. Louvain: Editions Peeters, 333-354.
- Coseriu, Eugenio. 2001 [1976c]. Vers une typologie des champs lexicaux. In Hiltraud Dupuy-Engelhardt, Jean-Pierre Durafour and François Rastier, eds. *L'homme et son langage*. Louvain: Editions Peeters, 385-410.
- Coseriu, Eugenio. 2007 [1988]. *Sprachkompetenz. Grundzüge der Theorie des Sprechens*. Tübingen: Narr.
- Croft, William. 1990. *Typology and Universals*. Cambridge: Cambridge University Press.
- Croft, William. 2003. *Typology and universals* (2nd edn.). Cambridge University Press, Cambridge.

- Cruse, Alan. 1992. Antonymy revisited: Some thoughts on the relationship between words and concepts. In Adrienne Lehrer and Eva Feder Kittay, eds. *Frames, Fields and Contrasts: New Essays in Semantic and Lexical Organization*. Hillsdale: Lawrence Erlbaum Associates, 289-306.
- Cruse, Alan. 2000. *Meaning in Language. An Introduction to semantics and pragmatics*. Oxford: Oxford University Press
- Cruse, Alan. 2011. *Meaning in Language. An Introduction to semantics and pragmatics*. Oxford: Oxford University Press.
- Dalrymple, Mary and Ronald Kaplan. 2000. Feature indeterminacy and feature resolution. *Language* 76 (4), 759-798.
- Daniels, Michael. 2001. On a type-based analysis of feature neutrality and the coordination of unlikes. In Frank van Eynde, Lars Hellan and Dorothee Beermann, eds. *Proceedings of the Seventh International HPSG Conference*. Trondheim, Norway 3-5 August: Norwegian University of Science and Technology, 137-147.
- Davidsen-Nielsen, Niels. 1978. *Neutralization and Archiphoneme. Two Phonological Concepts and Their History*. Copenhagen: Akademisk Forlag.
- De Backer, Maarten. 2009. The concept of neutralisation outside the field of phonology. *Indogermanische Forschungen* 114, 1-59.
- De Backer, Maarten. 2010. Lexical neutralisation: a case study of the lexical opposition 'day'/'night'. *Language Sciences* 32 (5), 545-562.
- De Caluwe, Johan and Ariane van Santen. 2001. *Gezocht: Functiebenamingen (M/V): Wegwijzer voor vorming en gebruik van Nederlandse functiebenamingen*. Den Haag: Sdu Uitgevers.
- De Groot, Albert Willem. 1940. Neutralisation d'oppositions. *Neophilologus* 26. Groningen/Batavia: J.B. Wolter's Uitgevers-Maatschappij NV, 127-146.
- Dietrich, Wolf. 1995. Das französische Wortfeld *savoir/connaître* in seinem paradigmatischen 'Umfeld'. In Ulrich Hoinkes, ed. *Panorama der Lexikalischen Semantik*. Tübingen: Narr, 141-150.
- Dietrich, Wolf. 1997. Polysemie als 'volle Wortbedeutung' gegen die 'Mehrdeutigkeit der Zeichen'. In Ulrich Hoinkes and Wolf Dietrich, eds. *Kaleidoskop der Lexikalischen Semantik*. Tübingen: Narr, 227-238.
- Doleschal, Ursula. 1998. Entwicklung und Auswirkungen der feministischen Sprachkritik in Österreich seit 1987. In Gisela Schoenthal, ed. *Feministische Linguistik – Linguistische Geschlechterforschung*. Hildesheim: Olms, 87-115.
- Dressler, Wolfgang Ulrich. 1985. On the predictiveness of Natural Morphology. *Journal of linguistics* 21, 321-337.
- Dressler, Wolfgang Ulrich, Willi Mayerthaler, Oswald Panagl and Wolfgang Ullrich Wurzel. 1987. *Leitmotifs in Natural Morphology*. Amsterdam/Philadelphia: John Benjamins.
- Dressler, Wolfgang Ulrich. 2006. Natural Morphology, special issue of *Folia Linguistica*, Vol. 40, issue 1, part 2. Berlin/New York: Mouton de Gruyter.
- Dubois, Jean. 1964. Distribution, ensemble et marquee dans le lexique. In Bernard Quemada, ed. *Cahiers de Lexicologie IV* (1). Paris: Larousse, 5-16.
- Ducrot, Oswald. 1972. *Dictionnaire encyclopédique des sciences du langage*. Paris: Seuil.
- Dupuy-Engelhardt, Hiltraud. 1990. *La saisie de l'audible. Etude lexématique de l'allemand*. Tübingen: Narr.

- Dupuy-Engelhardt, Hiltraud. 1995. Zur Beschreibung lexikalischer Bedeutung. In Ulrich Hoinkes, ed. *Panorama der Lexikalischen Semantik*. Tübingen: Narr, 151-158.
- Eckman, Fred, Edith Moravcsik and Jessica Wirth, eds. 1986. *Markedness*. New York/London: Plenum Press.
- Fellbaum, Christiane. 2000. Autotroponymy. In Yael Ravin and Claudia Leacock, eds. *Polysemy: theoretical and computational approaches*. Oxford: Oxford University Press, 52-67.
- Fenk-Oczlon, Gertraud. 1991. Frequenz und Kognition. Frequenz und Markiertheit. *Folia Linguistica* 25, 361-94.
- Garvin, Paul. 1951. L'obviation en Kutenai – échantillon d'une catégorie grammaticale amériindienne. *Bulletin de la Société de Linguistique de Paris* 47, 166-212.
- Garvin, Paul. 1958. A Descriptive Technique for the Treatment of Meaning. *Language* 34 (1), 1-32.
- Geckeler, Horst. 1971a. Zur Wortfelddiskussion. Untersuchungen zur Gliederung des Wortfeldes „alt-jung-neu“ im heutigen Französisch. München: Wilhelm Fink Verlag.
- Geckeler, Horst. 1971b. Strukturelle Semantik und Wortfeldtheorie. München: Wilhelm Fink Verlag.
- Geckeler, Horst. 1971c. Lexikalische Strukturen im Vergleich: Kontrastive Skizze zur Strukturierung des Wortfeldes 'alt-jung-neu' im heutigen Italienisch, Spanisch und Französisch. In Karl-Richard Bausch and Hans-Martin Gauger, eds. *Interlinguistica: Sprachvergleich und Übersetzung*. Tübingen: Niemeyer, 123-137.
- Geeraerts, Dirk. 1985. Cognitive restrictions on the structure of semantic change. In Jacek Fisiak, ed. *Historical semantics – Historical word formation*. Berlin/New York: Mouton de Gruyter, 297-323.
- Geeraerts, Dirk. 1993. Vagueness's puzzles, Polysemy's Vagaries. *Cognitive Linguistics* 4 (3), 223-272.
- Geeraerts, Dirk. 1997. *Diachronic prototype semantics*. Oxford: Clarendon Press.
- Geeraerts, Dirk. 2010. *Theories of lexical semantics*. Oxford: Oxford University Press.
- Gerritsen, Marinel. 2002. Towards a more gender-fair usage in Netherlands Dutch. In Marlis Hellinger and Hadumond Bußmann, eds. *Gender across languages*, vol. 2. Amsterdam/Philadelphia: John Benjamins, 81-108.
- Givón, Talmy. 1990. *Syntax: A functional-typological introduction*, revised edn. Amsterdam/Philadelphia: John Benjamins.
- Godel, Robert. 1955. Remarques sur des systèmes de cas. *Cahiers Ferdinand de Saussure* 13, 34-44.
- Greenberg, Joseph. 2005 [1966]. *Language Universals*, with a preface by Martin Haspelmath., Berlin/New York: Mouton de Gruyter.
- Grice, Paul. 1975 [1967]. Logic and conversation. In Peter Cole and Jerry Morgan, eds. *Syntax and Semantics*, vol. 3: Speech acts. New York/San Francisco/London: Academic Press, 41-58.
- Grice, Paul. 1978. Further notes on logic and conversation. In Peter Cole, ed. *Syntax and semantics*, vol. 9: Pragmatics. New York/San Francisco/London: Academic Press, 113-127.
- Gundel, Jeanette, Kathleen Houlihan and Gerald Sanders. 1986. Markedness and distribution in phonology and syntax. In Fred Eckman, Edith Moravcsik and Jessica Wirth, eds. *Markedness*. New York/London: Plenum Press, 107-138.

- Gutiérrez Ordoñez, Salvador. 1981. Pluralismo y monismo semánticos. In Horst Geckeler, Brigitte Schlieben-Lange, Jürgen Trabant and Harald Weydt, eds. *Logos Semánticos. Studia linguistica in honorem Eugenio Coseriu (1921-1981)*, vol. 3. Berlin/New York/Madrid: Walter de Gruyter, 81-91.
- Haiman, John. 1980. The iconicity of grammar: isomorphism and motivation. *Language* 56 (3), 515-540.
- Haiman, John. 2008. In defence of iconicity. *Cognitive Linguistics* 19 (1), 35-48.
- Haspelmath, Martin. 2006. Against Markedness (and what to replace it with). *Journal of Linguistics* 42 (1), 25-70.
- Haßler, Gerda. 1991. *Der semantische Wertbegriff in Sprachtheorien vom 18. bis zum 20. Jahrhundert*. Akademie Verlag, Berlin.
- Heger, Klaus. 1964. Die methodischen Voraussetzungen von Onomasiologie und begrifflicher Gliederung. *Zeitschrift für romanische Philologie* 80, 486-516.
- Hellinger, Marlis. 1990. Kontrastive Feministische Linguistik. Mechanismen sprachlicher Diskriminierung im Englischen und im Deutschen. Ismaning: Hueber.
- Heringer, Hans-Jürgen. 1968. ‚Tag‘ und ‚Nacht‘. Gedanken zu einer strukturellen Lexikologie. In August Arnold et al, eds. *Wirkendes Wort*. Düsseldorf: Pädagogischer Verlag Schwann, 217-231.
- Hilty, Gerold. 1971. Bedeutung als Semstruktur. *Vox Romanica* 30, 242-263.
- Hjelmslev, Louis. 1935. La catégorie des cas. *Etude de grammaire générale*, volume 1. *Acta Jutlandica* 7 (1), xii-184.
- Hjelmslev, Louis. 1971 [1939]. Note sur les oppositions supprimables. In Louis Hjelmslev, *Essais Linguistiques*. Paris: Les Editions de Minuit, 90-96.
- Holenstein, Elmar. 1975. Roman Jakobsons phänomenologischer Strukturalismus. Baden-Baden: Nomos.
- Ingria, Robert. 1990. The limits of unification. *Proceedings of the Twenty-Eight Annual Meeting of the Association for Computational Linguistics*. Pittsburgh: Pennsylvania, 194-204.
- Irmen, Lisa and Astrid Köhncke. 1996. Zur Psychologie des generischen Maskulinums. *Sprache und Kognition* 15, 152-167.
- Itkonen, Esa. 2005. Concerning the synthesis between intuition-based study of norms and observation-based study of corpora. In *SKY Journal of Linguistics* 18, 357-377.
- Itkonen, Esa. 2011. On Coseriu's legacy. *Energieia*, Online-Zeitschrift für Sprachwissenschaft, Sprachphilosophie und Sprachwissenschaftsgeschichte 3. <http://www.romling.uni-tuebingen.de/energieia/zeitschrift/2011/on-coserius-legacy.html>
- Jakobson, Roman. 1929. Remarques sur l'évolution phonologique du russe comparée à celle des autres langues slaves. *Travaux du Cercle Linguistique de Prague* 2. Prague: Jednota Československých Matematiků a Fysiků.
- Jakobson, Roman and Morris Halle. 1956. *Fundamentals of Language*. The Hague: Mouton.
- Jakobson, Roman. 1962 [1959]. A New Outline of Russian Phonology. In Roman Jakobson, *Selected Writings I*. The Hague/Paris: Mouton, 533-537.
- Jakobson, Roman. 1962 [1962]. Retrospect. In Roman Jakobson, *Selected Writings I*. The Hague/Paris: Mouton, 631-658.
- Jakobson, Roman, Gunnar Fant and Morris Halle. 1965 [1952]. *Preliminaries to Speech Analysis*. Cambridge (Massachusetts): MIT Press.

- Jakobson, Roman. 1971 [1932]. Zur Struktur des russischen Verbums. In Roman Jakobson, *Selected Writings II*. The Hague/Paris: Mouton, 3-15.
- Jakobson, Roman. 1971 [1936]. Beitrag zur allgemeinen Kasuslehre: Gesamtbedeutungen der russischen Kasus. In Roman Jakobson, *Selected Writings II*. The Hague/Paris: Mouton, 23-71.
- Jakobson, Roman. 1971 [1939]. Signe zero. In Roman Jakobson, *Selected Writings II*. The Hague/Paris: Mouton, 211-219.
- Jakobson, Roman. 1971 [1940]. Das Nullzeichen. In Roman Jakobson, *Selected Writings II*. The Hague/Paris: Mouton, 220-222.
- Jakobson, Roman. 1971 [1957]. Shifters, Verbal Categories, and the Russian Verb. In Roman Jakobson, *Selected Writings II*. The Hague/Paris: Mouton, 130-147.
- Jakobson, Roman and Waugh, Linda. 1987 [1979]. *The Sound Shape of Language*. Berlin/New York/Amsterdam: Mouton.
- Janda, Laura. 1996. Unpacking markedness. In Eugene Casad, ed. *Cognitive linguistics in the Redwoods: The expansion of a new paradigm in linguistics*. Berlin/New York: Mouton de Gruyter, 207-233.
- Kabatek, Johannes. 2000. Einheitlichkeit der Bedeutung, Designat und Integrale Linguistik. In Bruno Staib, ed. *Linguistica romanica et indiana. Festschrift für Wolf Dietrich zum 60. Geburtstag*. Tübingen: Narr, 187-205.
- Kabatek, Johannes and Adolfo Murguía. 1997. Die Sachen sagen, wie sie sind.... Eugenio Coseriu im Gespräch. Tübingen: Narr, 271-312.
- Kastovsky, Dieter and Christiane Dalton-Puffer. 2002. Sexist German–non-sexist English or non-sexist German–sexist English? Historical observations on a pragmatic question. *Language Sciences* 24, 285-296.
- Klein, Franz-Josef. 1981. *Lexematische Untersuchungen zum französischen Verbalwortschatz im Sinnbezirk von Wahrnehmung und Einschätzung*. Genève: Droz.
- Klein, Josef. 1988. Die Benachteiligung der Frau im generischen Maskulinum – eine feministische Schimäre oder psycholinguistische Realität? In Nornert Oellers, ed. *Vorträge des Germanistentages Berlin 1987*, vol. 1, *Das Selbstverständnis der Germanistik*. Tübingen: Niemeyer, 310-319.
- Klein, Wolfgang. 1993. Ellipse. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld and Theo Venneman, eds. *Syntax. Ein Internationales Handbuch zeitgenössischer Forschung/An International Handbook of Contemporary Research*, vol. 1. Berlin/New York: de Gruyter, 736-799.
- Koch, Peter. 1998. Saussures mouton und Hjelmslevs trae: zwei Schulbeispiele zwischen Semstruktur und Polysemie. In Edeltraud Wemer, Ricarda Liver, Yvonne Stork and Martina Nicklaus, eds. *Et multum et multa. Festschrift für Peter Wunderli zum 60. Geburtstag*. Tübingen: Narr, 113-136.
- Lakoff, George. 1987. *Women, fire, and dangerous things. What categories reveal about the mind*. Chicago/London: University of Chicago Press.
- Lampach, Stanley. 1956. La relation des genres dans le système des pronoms de la troisième personne en français moderne. *Word* 12, 51-65.
- Lampach, Stanley. 1957. Remarques sur la neutralisation des oppositions grammaticales. *Travaux de l'Institut de Linguistique* 2, 183-203.
- Langacker, Ronald. 1987. *Foundations of cognitive grammar*. Vol 1. Stanford: Stanford University Press.

- Langacker, Ronald. 1988. An overview of cognitive grammar. In Brygida Rudzka-Ostyn, ed. *Topics in Cognitive Linguistics*. Amsterdam/Philadelphia: John Benjamins, 3–48.
- Langacker, Ronald. 1991. *Foundations of cognitive grammar*. Vol 2. Stanford: Stanford University Press.
- Legendre, Geraldine. 2009. The Neutralization Approach to Ineffability in Syntax. In Curt Rice and Sylvia Blaho, eds. *Modeling Ungrammaticality in Optimality Theory*. London: Equinox, 237–266.
- Lehmann, Christian. 2000. On the German numeral classifier system. In Chris Schaner-Wolles, John Rennison and Friedrich Neubarth, eds. *Naturally! Linguistic studies in honour of Wolfgang Ulrich Dressler presented on the occasion of his 60th birthday*. Torino: Rosenberg & Sellier, 249–253.
- Lehrer, Adrienne. 1985. Markedness and antonymy. *Journal of Linguistics* 21 (2), 397–429.
- Leiss, Elisabeth. 1997. Synkretismus und Natürlichkeit. *Folia Linguistica* 31, 133–160.
- Levin, Beth and Malka Rappaport Hovav. 1995. Unaccusativity: at the syntax-lexical semantics interface. vol. 26: *Linguistic Inquiry Monographs*. Cambridge, Massachusetts: MIT Press.
- Levinson, Stephen. 2000. *Presumptive Meanings. The Theory of Generalized Conversational Implicature*. Cambridge: MIT Press.
- Lévi-Strauss, Claude. 1963. *La pensée sauvage*. Paris: Librairie Plon.
- Levy, Roger. 2001. Feature indeterminacy and the coordination of unlikes in a totally well-typed HPSG. Unpublished manuscript, Stanford University. Available from <http://www.stanford.edu/~rog/papers/feature-indet.ps>.
- Levy, Roger and Carl Pollard. 2002. Coordination and neutralization in HPSG. In Frank van Eynde, Lars Hellan and Dorothee Beermann, eds. *Proceedings of the Eight International Conference on Head-Driven Phrase Structure Grammar*, Norwegian University of Science and Technology, Trondheim, Norway 3–5 August 2001, 221–234.
- Lévy-Bruhl, Lucien. 1910. *Les fonctions mentales dans les sociétés inférieures*. Paris: Félix Alcan.
- Lévy-Bruhl, Lucien. 1922. *La mentalité primitive*. Paris: Félix Alcan.
- Lievens, Sigfried, Hanneke Pyck, Katlijn Demuynck, Ida Dequeecker, Mieke Van Nuland and Luc Liessens. 2007. *Gezocht: vroedvrouw (M/V). Beschrijving van een gendermainstreamingsproces in een institutionele setting – Gender in het Competentie- en Beroepen Repertorium voor de Arbeidsmarkt (CO.BR.A)*. Gent: Academia Press.
- López-Serena, Araceli. 2009. Intuition, acceptability and grammaticality: a reply to Riemer. *Language Sciences* 31 (5), 634–648.
- Lutjeharms, Madeline. 2004. Bildung und Verwendung femininer Formen im Deutschen, Englischen, Französischen und Niederländischen: ein Vergleich. In Karin Eichhoff-Cyrus, ed. *Adam, Eva und die Sprache. Beiträge zur Geschlechterforschung*, vol. 5. Mannheim: Dudenverlag, 191–208.
- Lyons, John. 1968. *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Lyons, John. 1977. *Semantics I*. Cambridge: Cambridge University Press.
- Martinet, André. 1936. Neutralisation et archiphoneme. *Travaux du Cercle Linguistique de Prague* 6. Prague: Jednota Československých Matematiků a Fysiků, 46–57.

- Martinet, André, ed. 1957. La notion de neutralisation dans la morphologie et le lexique. Travaux de l'Institut de Linguistique 2. Paris: Librairie C. Klincksieck, 7-162.
- Martinet, André. 1968. Neutralisation et syncrétisme. *La Linguistique* 4, 1-20.
- Massner, Franziska. 2010. Das Generische Maskulinum heute: Ausdruck sprachlichen Sexismus oder neutrale Sprachform? München: Grin Verlag.
- Mathesius, Vilém. 1929. La structure phonologique du lexique du tchèque moderne. Travaux du Cercle Linguistique de Prague 1. Prague: Jednota Československých Matematiků a Fysiků, 67-84.
- Mayerthaler, Willi. 1981. Morphologische Natürlichkeit. Tübingen: Niemeyer.
- Meltzoff, Andrew. 1995. Understanding the intentions of others: re-enactment of intended acts by 18-month-old children. *Developmental Psychology* 31 (5), 838-850.
- Miestamo, Matti. 2005. Standard Negation. The Negation of Declarative Verbal Main Clauses in a Typological Perspective. Berlin/New York: Mouton.
- Mortelmans, Tanja. 2008. Zij is een powerfeminist. Nog eens functie- en rolbenamingen in het Nederlands vanuit contrastief perspectief. *Tijdschrift voor genderstudies* 10 (1), 7-19.
- Murphy, Lynne. 1994. A note on pragmatic markedness. In Lawrence Bouton and Yamuna Kachru, eds. *Pragmatics and Language Learning Monographs* 5. Urbana: University of Illinois, 277-288.
- Murphy, Lynne. 2003. Semantic relations and the lexicon: Antonymy, synonymy and other paradigms. Cambridge: Cambridge University Press.
- Murphy, Lynne. 2010. Lexical meaning. *Cambridge Textbooks in Linguistics*. Cambridge: Cambridge University Press.
- Needham, Rodney. 1973. Right and left – essays on dual symbolic classification. Chicago: University of Chicago Press.
- Neuliep, James, ed. 1991. *Replication Research in the Social Sciences*. Newbury Park, CA: Sage Publications.
- Newmeyer, Frederick J. 2003. Grammar is grammar and usage is usage. *Language* 79, 682-707.
- Nida, Eugene. 1975. *Componential Analysis of Meaning*. The Hague/Paris: Mouton.
- Petersen, Uwe, ed. 1975. *Sprachtheorie und allgemeine Sprachwissenschaft. Fünf Studien* (Spanish original 1962). München: Wilhelm Fink.
- Plank, Frans. 1987. Number Neutralization in Old English : Failure or Functionalism? In Willem Koopman, Frederike van der Leek, Olga Fischer and Roger Eaton, eds. *Explanation and Linguistic Change. Current Issues in Linguistic Theory* 45. Amsterdam/Philadelphia: John Benjamins, 177-238.
- Prieto, Luis. 1954. Signe articulé et signe proportionnel. *Bulletin de la Société de Linguistique* 50, 134-143.
- Pullum, Geoffrey and Arnold Zwicky. 1986. Phonological resolution of syntactic feature conflict. *Language* 62 (4), 751-773.
- Putnam, Michael and Joseph Salmons. 2013. Losing their (passive) voice: Syntactic neutralization in heritage German. *Linguistic Approaches to Bilingualism* 3, 233-252.
- Rachidi, Renate. 1989. *Gegensatzrelationen im Bereich deutscher Adjektive*. Tübingen: Niemeyer.
- Rappaport, Gilbert. 1980. Deixis and Detachment in the Adverbial Participles of Russian. In Catherine Chvany and Richard Brecht, eds. *Morphosyntax in Slavic*. Columbus: Slavica Publishers, 273-300.

- Riemer, Nicholas. 2009. Grammaticality as evidence and as prediction in a Galilean linguistics. *Language Sciences* 31 (5), 612–633.
- Ross, John. 1973. The Penthouse Principle and the order of constituents. You Take the High Node and I'll Take the Low Node. In Claudia Corum, T. Cedric Smithstark and Ann Weiser, eds. *Papers from the Comparative Syntax Festival*. Chicago, Illinois: Chicago Linguistic Society, 397–422.
- Rubinstein, Renate. 1979. *Hedendaags feminisme*. Amsterdam: Meulenhoff.
- Ruipérez, Martín. 1954. *Structure du système des aspects et des temps du verbe en grec ancien. Analyse fonctionnelle synchronique*. Paris: Annales Littéraires de l'Université de Besançon.
- Sangster, Rodney. 1982. *Roman Jakobson and Beyond: Language as a System of Signs*. Berlin/New York/Amsterdam: Mouton.
- Saussure, Ferdinand de. 1968 [1916]. *Cours de linguistique générale*. Edition critique par R. Engler. Wiesbaden: Harrassowitz.
- Schane, Sanford. 1970. Phonological and Morphological Markedness. In Manfred Bierwisch and Karl Erich Heidolph, eds. *Progress in Linguistics. A collection of papers*. The Hague/Paris: Mouton, 286–294.
- Schaumyan, Sebastian. 1986. The Semiotic Theory of Ergativity and Markedness. In Fred Eckman, Edith Moravcsik and Jessica Wirth, eds. *Markedness*. New York/London: Plenum Press, 169–217.
- Scheele, Brigitte and Eva Gauler. 1993. Wählen Wissenschaftler ihre Probleme anders aus als WissenschaftlerInnen? Das Genus-Sexus-Problem als paradigmatischer Fall der linguistischen Relativitätsthese. *Sprache und Kognition* 12, 59–72.
- Schifko, Peter. 1975. *Bedeutungstheorie: Einführung in die linguistische Semantik*. Stuttgart: Frommann-Holzboog.
- Schmidt, Sabine. 1989. *Theorie der sprachlichen Leerstelle und ihre Anwendung auf das Französische*. Tübingen: Narr.
- Schwartz, Linda. 1980. Syntactic markedness and frequency of occurrence. In Thomas Perry, ed. *Evidence and argumentation in linguistics*. Berlin: Walter de Gruyter, 315–333.
- Shapiro, Michael. 1983. *The Sense of Grammar. Language as Semeiotic*. Bloomington: Indiana University Press.
- Silverman, Daniel. 2012. *Neutralization. (Key Topics in Phonology.)* Cambridge: Cambridge University Press.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In Richard Dixon, ed. *Grammatical Categories in Australian Languages*. Canberra: Australian Institute of Aboriginal Studies, 112–171.
- Sneller, Agnes and Agnes Verbiest. 2000. *Wat woorden doen*. Bussum: Uitgeverij Coutinho.
- Sobkowiak, Włodzimierz. 1997. On the Logic of Markedness Arguments. Paper presented at the 30th Poznań Linguistic Meeting in May 1997.
- Söll, Ludwig. 1971. Die direkte Satzfrage im Übersetzungsvergleich. In Karl-Richard Bausch and Hans-Martin Gauger, eds. *Interlinguistica: Sprachvergleich und Übersetzung*. Tübingen: Niemeyer Verlag, 533–544.
- Stahlberg, Dagmar and Sabine Sczesny. 2001. Effekte des generischen Maskulinums und alternativer Sprachformen auf den gedanklichen Einbezug von Frauen. *Psychologische Rundschau* 52, 131–140.

- Stahlberg, Dagmar, Sabine Sczesny and Friederike Braun. 2001. Name your favourite musician. Effects of masculine generics and their alternatives in German. *Journal of Language and Social Psychology* 20, 464-469.
- Staib, Bruno. 1985. Neutralisations linguistiques en français et en espagnol. *Linguistique compare et typologie des langues romanes (Actes du XVIIème Congrès International de Linguistique et Philologie Romanes)*, vol. 2. Aix-en-Provence: Université de Provence, 146-158.
- Stankiewicz, Edward. 1991. The Concept of Structure in Contemporary Linguistics. In Linda Waugh and Stephen Rudy, eds. *New Vistas in Grammar: Invariance and Variation*. Amsterdam/Philadelphia: John Benjamins, 11-32.
- Steiger, Vera and Lisa Irmen. 2011. Recht verständlich und „gender-fair“: Wie sollen Personen in amtlichen Texten bezeichnet werden? Ein Vergleich verschiedener Rezipientengruppen zur Akzeptanz geschlechtergerechter Rechtssprache. *Linguistische Berichte* 227, 297-322.
- Stein, Dieter. 1988. On the Mechanisms of Morphological Change. In Michael Hammond and Michael Noonan, eds. *Theoretical Morphology. Approaches in Modern Linguistics*. San Diego: Academic Press, 253-249.
- Stuckard, Bettina. 2000. Sprachliche Gleichbehandlung – (k)ein Thema für Frauenzeitschriften? In Karin Eichhoff-Cyrus and Rudolf Hoberg, eds. *Die deutsche Sprache zur Jahrtausendwende. Sprachkultur oder Sprachverfall?* Mannheim: Dudenverlag, 224–245.
- Talmy, Leonard. 1988. The relation of grammar to cognition. In Brygida Rudzka-Ostyn, ed. *Topics in cognitive linguistics*. Amsterdam/Philadelphia: John Benjamins, 165-205.
- Taylor, John. 1995. *Linguistic Categorization. Prototypes in Linguistic Theory*. Oxford: Oxford University Press.
- Taylor, John. 1999. Structural semantics and cognitive semantics. In Andreas Blank and Peter Koch, eds. *Historical Semantics and Cognition*. Berlin/New York: Mouton de Gruyter, 17-48.
- Taylor, John. 2002. *Cognitive Grammar*. Oxford: Oxford University Press.
- Timmermann, Jörg. 2007. *Lexematische Wortfeldforschung einzelsprachlich und kontrastiv*. Tübingen: Narr.
- Tomić, Olga Mišeska, ed. 1989. *Markedness in Synchrony and Diachrony*. Berlin/New York: Mouton.
- Trnka, Bohumil. 1982 [1938]. On the Combinatory Variants and Neutralization of Phonemes. In Vilém Fried, ed. *Selected Papers in Structural Linguistics*. Berlin/New York/Amsterdam: Mouton, 119-124.
- Trnka, Bohumil. 1982 [1958]. On some Problems of Neutralisation. In Vilém Fried, ed. *Selected Papers in Structural Linguistics*. Berlin/New York/Amsterdam: Mouton, 149-155.
- Trnka, Bohumil. 1982 [1974]. A Few Remarks on Homonymy and Neutralisation. In Vilém Fried, ed. *Selected Papers in Structural Linguistics*. Berlin/New York/Amsterdam: Mouton, 356-360.
- Trömel-Plötz, Senta. 1978. Linguistik und Frauensprache. *Linguistische Berichte* 57, 49–69.
- Trubetzkoy, Nikolai Sergejevič. 1929. *Polabische Studien*. Sitzungsberichte der Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, Band 211, Abhandlung 4. Wien/Leipzig: Hölder-Pichler-Tempsky A.-G.

- Trubetzkoy, Nikolai Sergeyevič. 1931. Die phonologischen Systeme. Travaux du Cercle Linguistique de Prague 4. Prague: Jednota Československých Matematiků a Fysiků, 96-116
- Trubetzkoy, Nikolai Sergeyevič. 1932. Charakter und Methode der systematischen phonologischen Darstellung einer gegebenen Sprache. Proceedings of the [1st] International Congress of Phonetic Sciences, first meeting of the Internationale Arbeitsgemeinschaft für Phonologie, Amsterdam. (Repr. in: Archives néerlandais de phonétique expérimentale 8-9, La Haye: Martinus Nijhoff, 109-113. 1933).
- Trubetzkoy, Nikolai Sergeyevič. 1933. La phonologie actuelle. Journal de Psychologie normale et pathologique 30, 227-246.
- Trubetzkoy, Nikolai Sergeyevič. 1936a. Essai d'une théorie des oppositions phonologiques. Journal de Psychologie normale et pathologique 33, 5-18.
- Trubetzkoy, Nikolai Sergeyevič. 1936b. Die Aufhebung der phonologischen Gegensätze. Travaux du Cercle Linguistique de Prague 6. Prague: Jednota Československých Matematiků a Fysiků, 29-45.
- Trubetzkoy, Nikolai. 1939. Grundzüge der Phonologie (Travaux du Cercle Linguistique de Prague 7). Prague: Jednota Československých Matematiků a Fysiků.
- Trubetzkoy, Nikolai. 1975. N.S. Trubetzkoy's Letters and Notes, prepared for publication by by Roman Jakobson. The Hague/Paris: Mouton.
- Ulrich, Miorita. 1988. Neutrale Männer – markierte Frauen. Feminismus und Sprachwissenschaft. Sprachwissenschaft 13, 383-399.
- Vachek, Josef. 1959. The London Group of Linguists. Sborník prací filosofické fakulty brněnské university 7:8, 106-113. Brno: Universita J.E. Purkyne, n.d.
- Vachek, Josef. 1966. The Linguistic School of Prague: An Introduction to its theory and practice. Bloomington/London: Indiana University Press.
- van Alphen, Ingrid, 1983. Een vrouw een vrouw, een woord een woord. Over de gelijke behandeling van vrouwen en mannen en de konsekventies daarvan voor beroepsbenamingen in het Nederlands. Tijdschrift voor Vrouwenstudies 14 (4), 307-315.
- Van Der Gucht, Fieke. 2005. Het 'polysemie-monosemie'-debat. Contrastieve analyse van de cognitieve en de structureel-functionele semantiek. Unpublished PhD dissertation Ghent University (<http://www.taalwetenschap.ugent.be/file/41>).
- Van Langendonck, Willy. 1984. Markedness, prototypes and language acquisition. KUL. Leuven: Departement linguïstiek.
- Van Loon, Jozef. 1996. Endogene factoren in de diachrone morfologie van de Germaanse talen. Tongeren: George Michiels.
- Van Santen, Ariane. 2003. How feminine is a linguist? On the meaning of non-feminine names of professions. In Arie Verhagen and Jeroen van de Weijer, eds. Usage-based approaches to Dutch. Lexicon, grammar, discourse. Utrecht: LOT, 7-26.
- Verbiest, Agnes. 1991. Het gewicht van de directrice. Taal over, tegen, door vrouwen. Amsterdam: Contact.
- Verbiest, Agnes. 1997. De oorbellen van de minister. Taal en denken over vrouwen. Amsterdam: Contact.
- Verstraete, Jean-Christophe. 2005. Two types of coordination in clause combining. Lingua 115, 611-626.
- Waugh, Linda and Monique Monville-Burston, eds. 1990. On Language. Roman Jakobson. Cambridge/London: Harvard University Press.

- Waugh, Linda. 1975. A semantic analysis of the French tense system. *Orbis* 24 (2), 436–485.
- Waugh, Linda. 1976. *Roman Jakobson's Science of Language*. Lisse: The Peter De Ridder Press.
- Waugh, Linda. 1982. Marked and Unmarked: A Choice between Unequals in Semiotic Structure. *Semiotica* 38 (3/4), 299–318.
- Willems, Klaas. 2003. Eugenio Coseriu (1921–2002). Versuch einer Würdigung. *Leuvense Bijdragen* 92, 1–25.
- Willems, Klaas. 2005. Neutralisierung und Ikonizität. Die Aufhebung semantischer Oppositionen in lexikalischen und syntaktischen Paradigmen und die Natürlichkeit der Sprache. *Sprachwissenschaft* 30 (4), 369–430.
- Willems, Klaas. 2011. Meaning and interpretation: the semiotic similarities and differences between Cognitive Grammar and European structural linguistics. *Semiotica* 185, 1–50.
- Willems, Klaas. 2012. Intuition, introspection and observation in linguistic inquiry. *Language Sciences* 34 (6), 665–681.
- Wunderli, Peter. 1989. *Französische Lexikologie. Eine Einführung in die Theorie und Geschichte des französischen Wortschatzes*. Tübingen: Niemeyer.
- Wunderli, Peter. 1995. Strukturelle Semantik, Polysemie und Architektur der Sprache. Zu einigen aktuellen Problemen der Bedeutungsanalyse. In Ulrich Hoinkes, ed. *Panorama der Lexikalischen Semantik. Thematische Festschrift aus Anlaß des 60. Geburtstags von Horst Geckeler*. Tübingen: Narr, 791–806.
- Zaenen, Annie and Lauri Karttunen. 1984. Morphological non-distinctiveness and coordination. *Eastern States Conference on Linguistics* 1, 309–320.
- Ziegler, Christiane. 2008. *Queens of Egypt: From Hetepheres to Cleopatra*. Paris: Somogy.
- Zlatev, Jordan. 2011. From cognitive to integral linguistics and back again. *Intellectica* 56 (2), 125–147.
- Zwicky, Arnold. 1978. On Markedness in Morphology. *Die Sprache* 24 (2), 129–143.

Corpora

- 38 Miljoen Woordencorpus (INL, Instituut voor Nederlandse Lexicologie): <http://www.inl.nl/nl/corpora/38-miljoen-woorden-corpus-1996>
- IDS-corpus COSMAS II (Deutsches Referenzkorpus, DeReKo): <http://www.ids-mannheim.de/cosmas2/>
- CREA-corpus, corpus of the Real Academia Española: <http://corpus.rae.es/creanet.html>
- Mittelhochdeutsche Begriffsdatenbank: <http://mhdbdb.sbg.ac.at:8000>
- Thesaurus Indogermanischer Text- und Sprachmaterialien: <http://titus.uni-frankfurt.de/indexe.htm>

Dictionaries

- Beck, Heinrich et al (eds.). 2005. Reallexikon der germanischen Altertumskunde. Founded by Johannes Hoops, second edition, volume 30. Berlin/New York: Walter de Gruyter.
- Duden Deutsches Universalwörterbuch, herausgegeben von der Dudenredaktion, Mannheim etc., 2007.
- Duden. 1999. Das große Wörterbuch der deutschen Sprache. Mannheim: Dudenverlag.
- Grimm, Jacob and Wilhelm Grimm. Deutsches Wörterbuch, online available on <http://germazope.uni-trier.de/Projects/DWB>.
- Klappenbach, Ruth and Wolfgang Steinitz, eds. 1978–1980. Wörterbuch der deutschen Gegenwartssprache. Berlin: Akademie-Verlag.
- Lexer, Matthias. 1974. Mittelhochdeutsches Handwörterbuch. Zugleich als Supplement und alphabetischer Index zum mittelhochdeutschen Wörterbuch von Benecke-Müller-Zarncke (Leipzig, S. Hirzel, 1872-1878). Stuttgart: S. Hirzel.

